

## Women's retraining prospects worsen

by Charlotte Barry

The proportion of women in the Training Opportunities Programme, the Government's adult retraining scheme, will fall from 40 to 28 per cent by next year as a direct result of proposals to cut commercial and clerical courses by half.

This is revealed in a confidential review of TOPS objectives for 1981-82 by the training opportunities division of the Manpower Services Commission which is currently being considered by the MSC.

Government-imposed cuts in staff and resources at the MSC mean that the number of people completing training in 1982-83 will drop to 60,000 from 74,500. Commercial and clerical training numbers will drop from 23,000 to 13,000.

Women, who fill 90 per cent of the places on the commercial and clerical courses, will also be badly affected by cuts in training for the semi-skilled and the decision to shelve proposals to introduce courses in health, welfare and other service occupations. However, the MSC plans to run publicly funded courses to encourage more women to enter non-traditional, male-dominated areas.

The training services division's review also reveals plans to reduce management classes from 3,000 completions in 1979-80 to about 1,100 in 1982-83 and shift the balance from long academic courses to shorter, more specialized ones.

An expected steep decline in employment opportunities in the engineering industry and a serious

underoccupation of TOPS classes in mechanical engineering, which occupy 38 per cent of skill centres' effort, is met with support for the closure of poor performing classes and their replacement with courses in electrical or electronic fields.

The review reports a planned increase in computer and computer-related training from 3,200 in 1979-80 to about 4,000 in 1980-81. It also says that the provision of places on preparatory courses will be maintained in 1981-82 at "broadly" the 1980-81 level of 1,500, although the training services division is seeking some reduction in average course length.

The provision of wider opportunities courses will be retained at the 1980-81 level of more than 1,000

places, and wider opportunities for women courses will double the total number of places to just over 400 in 1980-81.

A measure likely to prove unpopular with the further education colleges where a substantial amount of TOPS work takes place is the review's plans to increase efforts to secure "value for money" from the training provided for it by others. This would involve the training services division in determining course lengths, tightening up on selection criteria for entrants and seeking to negotiate competitive fees. It has been estimated that further education and privately owned secretarial colleges could lose up to £7m next year as a result of the cuts in commercial and clerical training.

## State sector tips Oxford balance

by Paul Flather

More students from state schools will go up to Oxford this year than an equal number of undergraduates from private and state schools expected at Cambridge.

The figures for Oxford in 1979-80 (19 per cent of the total state sector, and 1360 (19 per cent) from independent and grant schools. For Cambridge, figures are 1,464 (49.5 per cent) from the state sector and 1,464 (49.5 per cent) from other schools.

Both universities cite a number of reasons for the gradual increase in the number of students from state schools. At Oxford, the increase is due to the greater efforts made by the university to make direct contact with the state sector by inviting students and by visiting the universities.

A key factor is the intake of women students, the majority of Oxford's new entrants being women. At Oxford, 28 colleges are now while at Cambridge the new women students have increased 11.7 per cent in 1968-69 to 5.5 per cent in 1978-79. There are fewer private schools for men than for women, and this has drawn wider more state schools have been admitted.

Another major factor is increased use of the "open offer" which entrance candidates achieve by attending a college for a period of time before being accepted. At Oxford, 80 per cent of the intake through conditional offers.

The figures come in contrast to a statement by the independent schools' association, which says that the state sector's share of the total intake has fallen from 11.7 per cent in 1968-69 to 5.5 per cent in 1978-79.

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# Higher Education SUPPLEMENT

July 25, 1980 No 404

## Sir Keith puts Finniston in danger

by Robin McKie  
Science Correspondent

The Government is preparing to delay its decision on implementing the Finniston report and there are now growing fears that Sir Keith Joseph, Secretary of State for Industry, may oppose the establishment of a statutory engineering authority, the report's principal recommendation.

These developments follow recent background moves by the Engineering Fellowship, a recently-formed learned body of engineers, whose officers have had private meetings with Sir Keith. They have proposed running a British Council of Engineering, a purely advisory body with no real power to control the engineering profession.

Their plan has found favour with Sir Keith, although it directly opposes the report of Sir Monty Finniston's committee of inquiry

which called for a powerful, statutory engineering authority to control registration of engineers, accredit university courses and set general standards in a bid to improve UK manufacturing industry. The general officers would continue to do so despite general discontent with its work.

The fellowship's plan has the advantage of providing it with a Royal Charter to run the British Council of Engineering and would also allow Sir Keith to be seen to be taking some action without establishing a body that some Tories may consider to be merely another quango.

A proposal to set up the suggested council is certain to arouse furious opposition, given the general popularity of the Finniston plan. Many will see the fellowship proposal as a simple wrecking job, put forward in secret and in contradiction to its public support of Finniston, that is intended to cause as little disruption to the system as possible and will leave the control of power where it exists at present.

It would have no statutory powers and would merely act as a talking shop. The Council of Engineering Institutions, which presently controls registration of engineers, would continue to do so despite general discontent with its work.

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## Edinburgh sees red on blue films

by Olga Wojtas  
Scottish Correspondent

Three sexually explicit films ordered from America by Edinburgh University's department of psychology are still in the hands of HM Customs; two years after they were seized as pornography.

Members of staff at Edinburgh believe that only high level intervention from the Ministry of Health will lead to the films' release. "But this is a sensitive issue. Nobody wants to have to deal with it," said a staff member.

The only concession by the customs men so far is that the films have not been destroyed as would normally have happened.

Ten similar films, specifically made for clinical and education purposes to help patients with sexual difficulties, have already been imported by Edinburgh. Customs have been warned that these would be seized and had accepted the university from normal restrictions.

The next time the university thought there was no need to forewarn customs, the films were seized. "I was shocked and went to the police," said a staff member.

Dr Philip Myerscough, senior lecturer in obstetrics and gynaecology, said: "I would find it difficult to justify customs' decision. Presumably there is some local customs officer making God-like decisions about what is educational material and what is pornography. Some people think the Venus de Milo is pornographic."

## NUS opens fire in the student loans debate

by Paul Flather

The first salvo in the debate on replacing the system of student grants with a system of loans, was fired today by the National Union of Students.

The union has published a 22-page document, *The Case Against Student Loans*, which argues that any sort of loan system would be costly, inefficient, and irreparably damaging to the education system. Loans would "confer none of the advantages claimed for them," says the document, which has taken the union's welfare department six months to research.

The union puts forward five major objections: loans would produce only limited savings; they will distort the range of subjects studied; they will be a major disincentive to study; they will restrict the ability of universities and colleges to respond to national needs; and they will increase inefficiency.

The NUS is convinced the Government is seriously considering different types of loan system. Many MPs, including Sir Keith Joseph and Dr. Rhodes Boyson, have indicated support for loans. Officers from the Association of County Councils and the Council of Local Education Authorities, have shown interest and the House of Commons Select Committee on Education took evidence on loans. More than £400m is spent on maintenance grants each year.

The union wants both an informed debate and to prevent any superficial attraction to loans instead of grants at a time of economic hardship. It condemned a recent survey on public support for loans, by the Institute of Economic

Affairs as "shoddy and unrepresentative."

On savings, the NUS points out that money will have to be spent hiring staff, and experience in other countries has shown it would take 20 years before repayments became significant. In Sweden 25 per cent costs came from repayments after 20 years, in the Netherlands 11 per cent.

"The problems of collection are clearly legion," says the NUS. In the United States where one in five students default, some emigrating to avoid repayment, private agencies have been hired to collect £10m covering 20,000 cases.

The NUS document says students would be forced to study subjects such as law or medicine which promised high secure incomes. Expenditure elsewhere also suggested higher wastage rates, forced "localization" of student intake, and courses would take longer to complete, all unhealthy signs.

At a critical time loans would reduce the size of the skilled workforce created in the country, reduce research work and perhaps add to unemployment, particularly in Scotland.

## DES forecasts overseas drop

by Peter David

A big drop in the number of overseas students in polytechnics and colleges next year—with demand down by between 25 and 50 per cent—is forecast in unpublished government estimates being used to determine local authority finances in 1981-82.

Although ministers have refused to speculate publicly about the impact of their decision to charge overseas students full cost fees from next September, the Department of Education and Science has privately drawn up detailed numerical forecasts.

They show that overseas student numbers in maintained colleges will decline by at least a quarter next year and, in the "worst case" estimate, by a half.

The estimates, which relate only to public sector institutions, show overseas student numbers in higher education declining from 18,500 in the current year to 13,800 in 1982-83. In 1980-81 numbers will drop to 16,200 and in 1981-82 to 14,700.

In further education overseas numbers will fall from 22,700 this year to 18,000 next year and 16,500 in 1982-83.

The estimates are contained in a report to a meeting next week of the Consultative Council on Local Government Finance, which is presided over by Mr. Michael Heseltine, the Environment Secretary, and negotiates the level of the annual Rate Support Grant.

But the report says there is disagreement between the DES and local government about the serious nature of the decline in overseas numbers. Local authority negotiators believe the department's worst case estimate of a decline of 50 per cent next year with no recovery, to be a real possibility.

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## Jodrell Bank 'inferior' says report

by Robin McKie  
Science Correspondent

Jodrell Bank, the world's first major centre for radio astronomy, is now being produced second-hand research, a science policy report has alleged.

The paper, prepared by Ben Martin and John Irving of Sussex University's science policy research unit, states that the research work at Jodrell Bank in Cheshire is distinctly inferior to that of Britain's other major radio astronomy centre in Cambridge, and also to others in Holland and Germany.

A new technique for comparing the quality of similar research programmes, called "the method of converging partial indicators", was developed by Mr Martin and Mr Irving, for their investigation of "high science" projects.

This technique takes account of numbers of international publications, produced by researchers at a centre; citation rates for each paper; numbers of highly cited papers; and peer-reviewings of papers.

The two researchers, who argue that recent past performance of Jodrell Bank is one of the best guides to a centre's future research performance, state there was "considerable convergence" between results obtained through these four different approaches.

Cambridge not only has a higher productivity than Jodrell Bank, but also, its papers seem to have on average, a higher impact," Mr Martin and Mr Irving state in their report which was presented at a science policy conference in York, May 1980.

Moreover, in terms of highly cited papers, the contrast is even more marked, Cambridge producing 11 of the top 100 cited papers and Jodrell Bank only one.

The Cambridge centre, which costs £200,000 a year, has a reputation for "extremely well" as a research centre, and has produced some of the top radio astronomy work in the world. On the other hand, Jodrell Bank, which has a running cost of £120,000, must be relegated to second division status in these terms.



Sixth-formers take a look at machines in the engineering department at Bath University, as part of a Scheme designed to increase the number of women entering the profession. The 36 young women are the first of some 350 who will stay at state universities this summer in a programme organized by the Engineering Industry Training Board.

## Teesside Polytechnic given clean bill of health

Teesside Polytechnic, the subject of a highly critical report by the CNAAC (for National Academic Awards) in 1978, has been given a clean bill of health, it is revealed, this week.

A two day interim review of the polytechnic carried out by the CNAAC last December was fully satisfied with the improvements in resources at Teesside. The most recent review, a quinquennial, will take place in 1983.

The CNAAC review found relations between the polytechnic and Cleveland local education authority had "improved almost beyond recognition". The departments were "rejuvenated", staff training and development had made "good progress", and library and learning resources had been expanded.

The interim committee had concluded that for the first time since its establishment in 1973, the polytechnic was in a position to meet the challenges set up by the CNAAC and would continue to do so.

Following the report, funding for

the polytechnic for 1979-80 was increased by 17.2 per cent and an additional £375,000 set aside for capital investment. Accommodation was improved, an extra grant of £200,000 made to the library, and a network of committees to coordinate courses was set up.

"Processes had been designed, and there was an evident determination to ensure they were now put to good use," says the new CNAAC report. It was particularly impressed with the role played by the academic board itself and relationship with the local education authority.

Dr Michael Longfield, who became director of Teesside in 1979, said the polytechnic was an indisputable landmark in the field of higher education in the north east and had made considerable progress in the last two years. The last two years form only a chapter in the history of the polytechnic but it is a chapter we are proud to be closed," he said. Staff meeting the challenges set up by the CNAAC and would continue to do so.

## Reprieve for Whistler collection

There is now hope that Glasgow University will not be forced to sell 11 canvases from its prized Whistler collection to help pay for its Hunterian art gallery, opened last month.

The university, left with a shortfall of £320,000 from the £1.5m gallery, launched an appeal which realized £112,000. Another £30,000 has also been offered from three sources on condition that the university does not sell the paintings.

Frank Whistler, who has challenged critics of the proposed sale and the appeal to the press, he said, have suggested that the appeal be spread wider. But the university had already received thousands of people including 50,000 graduates, and most of the money had come in £5 donations from them.

The university court is meeting at the end of the month to take a final decision on the sale of the paintings which are at present at a London art dealer's.

## Teachers force arbitration

The management side of the Scottish Teachers' Bureaux Committee, the negotiating body for school and further education staff, has decided to force the dispute to arbitration.

The union, which has a ballot of 10,000 members, has rejected the offer of arbitration by the management side. The union is now in a position to force the dispute to arbitration.

## Next week

Manpower planning, for against  
Academic freedom in France  
Religion and secularization  
The pitfalls of college money  
Shortage subjects in schools

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## Inquiry set up on poly, college constitutions

The Government made a major concession to local education authorities last week, and agreed to set up a joint inquiry into the constitutions of polytechnics and colleges.

Dr Rhodes Boyson, the higher education under-secretary, told a delegation from the Council of Local Education Authorities that a joint committee of Education Department and local government officers would review college constitutions to see whether there was a case for

enhancing the powers of maintaining local authorities.

But he made it clear that the DES would not agree to the council's demand that the Secretary of State should discard his right to monitor and approve the instruments of government which lay down the powers of academic boards, governing bodies and local education authorities.

Local authority leaders to regain some of the management powers that have been ceded to polytechnic governing bodies by instruments of government approved by the DES.

Authorities want to be able to exert more detailed control of polytechnic budgets and course approvals, as well as acting as the undisputed employers of all polytechnic staff with responsibility for redundancies and redeployment.







# 'University of the air' lifts off

from Clive Cookson

WASHINGTON  
Interim in creating a national open university in the United States continues to bubble. Two important new developments that may bring the idea closer to reality were announced recently.

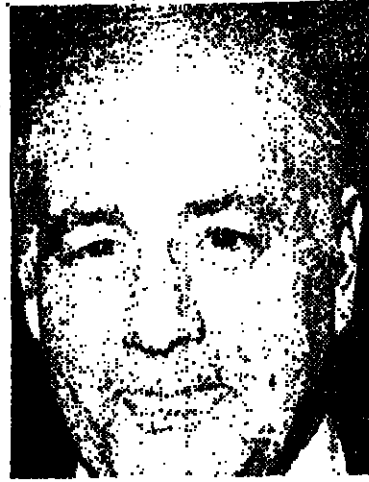
First, The Internal Revenue Service (IRS) has ruled favourably on a proposal by Walter Annenberg, the publishing multimillionaire, to give \$10m a year over the next 15 years to the Corporation for Public Broadcasting to set up a "national university of the air". Both donor and recipient wanted to know the tax consequences of the gift before they started detailed discussions about its use.

Secondly, the University of Mid-America, a consortium of 11 state universities in the Midwest which already operates as a sort of regional open university, has launched a feasibility study for a nationwide "Open University of America". It is the second group with such plans—after the American National University Consortium, based in Maryland, will be starting the country's first nationwide distance learning network in the autumn, on a pilot scale.

The proposed \$150m gift by Mr Annenberg, a former American ambassador to Britain, is potentially of great significance because the major obstacle to the establishment of a large-scale open university in the United States has always been finance. Of course \$150m a year would not be nearly enough to finance such an institution when fully operational, but, as a spokesman for the ex-ambassador said, it would be "useful seed money to get the thing started".

No details of the way the Corporation for Public Broadcasting would use the gift have been revealed by either side, and Corporation President Robbott Fleming (former president of the University of Michigan) refused to say anything "until additional discussions have taken place". Mr Annenberg, however, indicated that they had not yet decided how to proceed, but said that the ambassador, Mr Fleming and their aides were meeting this week to make plans.

However, one certain aspect of Mr Annenberg's thinking, which would set his National University of the Air apart not only from Britain's Open University but also from the National University Consortium and the University of Mid-America, is known. It wants the institution to serve primarily the traditional college age group (18 to 21), not adults.



Walter Annenberg: former ambassador.

Although the idea goes right against the conventional thinking of most people in American higher education, Mr Annenberg believes there are still tens of thousands of young men and women who cannot afford or do not want to go away to a conventional college or university but who would be well served by a new university that reached them at home with modern electronic technology—including videodiscs as well as television.

What remains to be seen is how much personal control Mr Annenberg, who is 72, will insist on retaining over the way his gift is spent. If he leaves the broadcasting corporation a lot of freedom, the National University Consortium and/or the University of Mid-America may receive some of the money to develop their own proposals.

Mr Annenberg's personal inclination might well be to exclude them, one source indicated, because their efforts would be aimed firmly at mid-career adults, and he very definitely wants his money to be spent on young people. Those concerned know that Mr Annenberg, whose greatest money spinner has been the magazine TV Guide, must be handled respectfully; he is a touchy donor and on at least one occasion in the past he has withdrawn a large proposed gift, because people started asking awkward questions about it.

How would an established Open University survive financially in the United States? Not by tuition fees, but by a very high percentage of students in non-traditional programs go on to enroll at another more traditional institution.

interview that he did not believe many students would be prepared to pay more to take courses from an Open University than from a conventional public college.

Typically, tuition at the latter costs about \$750 a year in the United States—not nearly enough per student to meet the production and delivery costs of a distance learning system.

Nor can the federal or state governments be expected to provide the operating expenses of an American open university. The 11 member institutions of the University of Mid-America could not contribute to the development of the consortium, Dr Olson said, because they are all state institutions and state legislatures would not be prepared to spend public money on the project.

The Federal Policy and the Adult Learner, an American Open University, "should not be funded primarily by the federal government. On the other hand, there is a role for the federal government once there have been some indications that private monies are forthcoming," he continued.

"The Federal Government could aid and abet the Open University in a variety of ways—grants and contracts for a multitude of services that fulfill national purposes, including experimental programmes that would test hypotheses regarding adult students."

The key to the financial health of an open university in the United States would be industrial corporations, according to Mr Olson. Companies could be persuaded to provide philanthropic support through donations, but, much more importantly, they would buy its courses and programmes on a large scale basis.

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How would an established Open University survive financially in the United States? Not by tuition fees, but by a very high percentage of students in non-traditional programs go on to enroll at another more traditional institution.

# Maryland lecturers refuse to divulge salaries under new law

More than 1,500 university and college teachers in Maryland have filed individual lawsuits to block a new state law that requires them to make a full public disclosure of their private financial affairs.

The statute was passed by the Maryland legislature last year, as part of a wide-ranging "public life" law designed to clean up public life in a state that had had more than its share of corruption scandals in recent years.

The act compels any state employee earning more than \$19,619 a year to complete a detailed, 12-page disclosure form, giving full information about his or her financial assets (including all stocks, shares and property), all earned and unearned income, and any gifts worth more than \$25.

Faculty members in the state system of higher education did not realize they were included as state employees under the law until this spring, when the state ethics commission started mailing disclosure forms to them. Ad hoc faculty groups quickly sprang up to coordinate opposition to what they regard as an outrageous and unjustified invasion of privacy.

"Any member of the public has access to these financial disclosures. You don't even have to give a reason for wanting to see them," said assistant professor of nuclear engineering Donald Blair, who helped organize the ad hoc committee on faculty rights at the University of Maryland, College Park (the biggest campus in the state). "It is very obvious," he said.

It was too late to try to persuade the state legislature to amend the law, because the legislative session had ended. So the committees organized the filing of lawsuits by individual faculty members, charging that the law is unconstitutional because it invades privacy without justification. The law also forces policy-makers or make significant purchases with state funds, they argue, so there is no possibility that their financial statements might reveal a conflict of interest.

What particularly infuriates the faculty is that the law is not automatic. It requires them to file a statement if they earn more than the minimum income while it allows the state ethics commission to grant exemptions to people who serve on state boards and commissions, including governing boards of public colleges and universities. The law would yield more power and therefore far more likely to encounter con-

licts of interest than now, they say.

"We have 550 plaintiffs in College Park alone and I imagine that there are at least 1,500 named as defendants in these suits," said Dr Blair, one knows just how many in the state system of higher education can afford to sue the law, but the total was several thousand.

All the individual lawsuits probably be heard together by United States district court in more sometime in the autumn. The court has already issued a preliminary injunction to prevent state ethics commission from publishing the plaintiffs' disclosures. The judge said the suits should complete the forms but would remain in the court until the case is resolved.

The movement to make employees more accountable shows up potential conflict of interest has been running since America for several years. In half the states have enacted disclosure laws for the officials, but none has included faculty members at colleges and universities. Maryland's law is the first to do so.

Now that the storm has hit some of the legislators, the Maryland law is under cover, claiming that it is a mistake and they never intended to include academic members of the legislature. However, Professor Steven Brink, a president of the University of Maryland chapter of the American Association of University Professors, said the law is a "suspicious of their plain silence."

"I just cannot believe that people who are lawyers and who are in the inclusion of faculty in the act, did not know what they were doing," Professor Blair agreed that other people who were less closely involved with the act may have been recognized as such. "Several influential people have indicated that they try to change the law and the vast majority of faculty members who have no upward state contracts do not do so before the session begins in the state capital," he said. "They have to fight for their rights through the courts."

## Overseas News

# Language problems spark hunger strike

from Uli Schmetzer

ROME  
Two hundred Iranian students went on a hunger strike at Perugia this month in protest against numerous language courses at the Italian University for Foreigners.

The students barricaded themselves into a dilapidated theatre in the historic centre of the hilltop city and warned they would starve themselves to death unless the education ministry allowed them to sit for the required language test.

After a week 16 students were taken to hospital. Five are still there under observation.

"We are very worried because these boys mean it. They are running grave risks to their health," Doctor Carlos Vidoni Guidoni, a member of the university council, said.

The strike action has caused a bitter polemic between local administrators, who want to avoid trouble, and the Italian Government which is determined to impose numeric restrictions on the congested university for foreigners.

Last year the education ministry closed inscriptions to the university following the arrival of about 2,000 Iranian students.

In order to qualify for study at an Italian university foreign students require not only a secondary education certificate from their own country but also they must pass a language test in Italian. The courses for these tests are mainly held at the University for Foreigners at Perugia. There are also courses at the universities of Siena and Macerata, and students may sit for the tests at an Italian embassy in their own country.

"The flood of Iranian students who came to study in Italy began soon after the Iranian revolution, when many parents sent their children abroad to escape an unstable political situation," he said.

As a result, language courses at Perugia quickly became clogged and

former Education Minister Salvatore Valtieri (who was also the rector of the University for Foreigners) decided to block inscriptions on November 19 last year for 12 months.

Since then hundreds of Iranian students have arrived in Italy and 12 of them managed to attend the language courses at Perugia University without being enrolled. So when the time came for examinations this month they were told they could not sit for them.

The students then resorted to a permanent hunger strike.

The first reaction from the Italian Government was negative. A foreign ministry spokesman said: "Our institutions must not give in to this kind of blackmail."

But local administrators, eager to avoid problems in a city heavily dominated by Iranian students, favoured a more conciliatory solution, basing their argument on the fact that most of the strikers had already attended the courses.

"Our good ministers want to close the stable after the horses have bolted," complained vice-mayor Raffaele Rossi.

It appears some solution is being sought. The strikers will be able to sit for the examinations and the university will no longer allow non-enrolled students to attend its language courses.

But in the end the Iranian Ramadan is only the tip of the iceberg.

Foreign ministry official Sergio Romano said this month he feared that Italy was rapidly becoming a paradise for foreign students, particularly from Third World nations who thought they could obtain a relatively easy laurea (bachelor degree) in the country.

Last year, he said, more than 3,000 foreigners enrolled at Italian faculties. But for the academic year beginning this September, the ministry had already received more than 9,000 applications.

# Pros and cons of graduates working in unrelated fields

from Michael Binyon

MOSCOW

A recent survey of three towns in the Ural mountains shows that almost a third of graduates there are now working in fields unrelated to the subjects they studied at universities and higher education institutions.

A survey by a sociological research unit at the UFA Aviation Institute points to the extraordinary mobility of Soviet graduates. It shows that almost a third of graduates are now working in fields unrelated to the subjects they studied at universities and higher education institutions.

The three towns surveyed, Neftekamsk, Sterlitamak and Naberezhnye Chelny, at almost the geographical centre of the country, represent a cross-section of Soviet society.

It was found that more than half of mechanical engineering graduates were now working in other fields, and 43 per cent of production engineers and 34 per cent of electrical engineers were not employed in the fields for which they were trained. By contrast, only nine per cent of medical graduates were not working as doctors.

Reporting the results in a Soviet sociological journal, Dr N. A. Akov and Mr R. V. Nadebulin said they were both good and bad. In 1975 it cost the Soviet Union 3,040 million roubles (£2,172m) to provide higher education. If a third of these graduates worked outside the field for which they had been trained, most a billion roubles a year were being spent in what the authors called an "extremely inefficient way".

On the other hand, they argued, "mobility was necessary for the development of science and technology and the emergence of new fields of knowledge. People had to master new specialties to develop new branches of science and production."

The survey found that more than 70 per cent of people who had studied outside their field did so with reasons that had little to do with

scientific and technical progress. A third had chosen to do so simply because they could not find jobs using their qualifications.

In some cases vocational mobility was also social mobility. This is the case for example, when former teachers and agricultural specialists take workers' jobs because they cannot better pay. One of the Soviet Union's biggest educational problems now is the fact that it does not pay to go to university; a person can generally get a higher-paid job by going straight from technical school to a factory.

"This sort of mobility is extremely disadvantageous to society, which has spent large sums on the initial training of these specialists," the authors commented.

One of the main reasons people changed occupations was that their original higher education institutes and subjects of study were not chosen with enough care. Surveys have shown that up to 60 per cent of all students go on to higher education because they want to get a diploma, not because they are attracted to any particular discipline.

This is shown in students' academic results: those who enter colleges and universities out of academic conviction nearly always get "good" or "excellent" grades. But more than two-thirds of those who just drift into a subject because they want a diploma of some kind get only "satisfactory" and 20 per cent get "poor" marks.

The authors concluded that the changes of occupation were not very harmful and many of those taking jobs outside their fields of training were able to use many of the skills they had mastered. Another reason they performed well was the broad basic education provided in Soviet higher education. And in the case of people who devoted themselves to their field, did so with reasons that had little to do with

# Back seat forecast in Fraser plan

from Geoff Maslen

MELBOURNE  
Education is likely to take a back seat in this year's Australian Federal Election—at least if the Commonwealth government has any say.

Since the Fraser government came to power in 1975, capital and equipment grants to universities have fallen by 51 per cent in real terms, student allowances have shown an overall decline of 15 per cent, post-graduate awards have declined 36 per cent and triennial funding for capital and equipment has been replaced by annual allocations.

Falling school enrolments and an economy in recession have produced a beleaguered academia and so tightened government strings that some higher education institutions are in danger of strangling.

Now the Australian Labour Party has released its education platform almost six months before the federal election is likely to take place. It promises to spend at least \$500m more during the next three years than the present government plans. Since expenditure on education by the Commonwealth was about \$556,000m during the past three years, the Labour Party's proposed 5 per cent increase is not a large sum.

As the Australian Teachers' Federation commented: "The A.L.P. education policy promises only marginally more than the Government's guidelines laid down in May."

# Home will be the heart of new faculty

from Lionel Cohen

NIJMEGEN  
Friesland, that beautiful but isolated heart of the Dutch country, is a picturesque village, windmills and picturesque villages, will soon be getting its own university faculty.

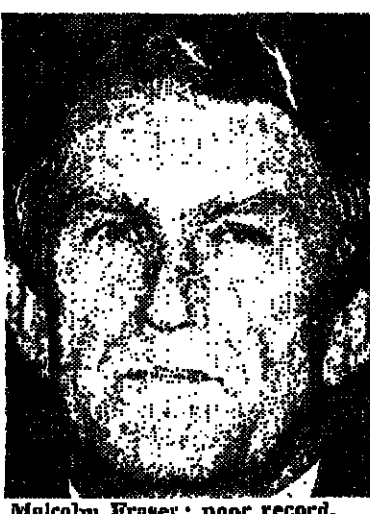
Giving this news to a joint meeting of representatives of the neighbouring University of Groningen and the two provincial authorities, Education Minister Dr Arie Pais made clear his belief that the first function for higher education in the province should be to develop the study of Friesland and the Fries.

Fries itself is a very ancient culture, the study of which is already long established in the Netherlands. The Fries language, in fact, has historical origins which precede by many centuries the development of modern "Hollands", and through its Fries-Saxonic roots enjoys very close links with the Anglo-Saxon origins of early English. Even today, the British tourist confronted with a Fries signpost, can find a familiar-sounding word, though the problem until recently has been the serious lack of comprehensive modern dictionaries in the Fries language.

It was precisely to fill this serious gap in the study of the language that, with the financial support of the Dutch Government, the *Fryske Akademy* in Leeuwarden has for the last few years been working on the preparation of the Great Fries Dictionary. The publication this year of the first volume—letter A—therefore marks a significant step forward in this discipline. With such a tool of historical reference, now taking concrete shape, the door is opened to a broadening of the area.

Thus the new faculty, which will initially be established under the aegis of the neighbouring University of Groningen, will comprise three later-related departments. One department, expected to be the largest of the three, will be concerned with development of the existing work of the *Fryske Akademy*, where it will be based. The other two departments will be devoted to research on the position of cultural minorities—as expected to establish programmes which will relate the study of Friesland and the Fries to the world outside. But the nature and scale of the research and teaching which will be established for this purpose is as yet not clear.

In particular, much will depend on the interests of the holder of the new chair. But the new faculty, which will be declared unconstitutional, said in this campaign week



Malcolm Fraser: poor record.

That is not to say that academics and teachers have not welcomed the increase, since the alternative is worse.

In any event, Labour has promised to redress some of the financial wrongs Australian higher education has suffered in recent years. For example Labour says it will increase research grants to teachers of national and public policy "such as energy and the creation of new industries. It will also fund applied research in colleges of advanced education where research traditionally has not played much part. Triennial recurrent funding

# Teachers, students and priests 'murdered in power struggle'

from Stephen Downer

MEXICO CITY

The "superior council" of El Salvador's Jesuit University has accused pro-government forces of systematically killing Jesuits, teachers, priests and students in the revolutionary Central American country this year.

"We lament, denounce and condemn the merciless repression of the people and especially of Salvadoran school teachers," the council, the main administrative body, says in a statement released in the Mexican capital.

The statement was handed to journalists by Salvadoran lawyer Senor Alberto Cuellar, who says that from the beginning of January until the end of June 3,313 people were murdered in El Salvador in the struggle for power between the right and left, and those in between. The university, whose official title is the Superior Council Central American University, claims that the anticlerical and academic violence—equaled in El Salvador's history—is the work of government security forces and right-wing paramilitary groups.

During the first six months of the year 72 schoolteachers were killed, some massacred in front of their pupils, according to the statement.

"Other teachers are in captivity and hundreds are fleeing from the continuous threats of the 'squadron of death' the 'white warrior union', the Salvadoran Anti-Communist Army and others."

"During these six months the security forces and other organisations have violently entered schools, national teaching institutes and private colleges, capturing and murdering students, searching the buildings and destroying institutions."

On June 26 the Salvadoran army attacked the National University of El Salvador, using armoured cars.

The statement claims that religious people and teachers are being eliminated "because they have been agents of the truth about what is going on in the country". The university refers to their "systematic and planned persecution" and says that the violence is the work of the government security forces and right-wing paramilitary groups.

The statement warns that the harm done to education in the small republic of five million will be felt for many years to come.

Senor Cuellar is director of an organisation called Judicial Aid of the Archbishopric of San Salvador, founded in 1975 and linked to the church since 1977.

He said that on July 3, 120 soldiers, protected by three armoured cars and other military vehicles, sacked the organisation's offices in San Salvador and took away valuable documents.

Among them were signed depositions made by witnesses helping the organisation to try to find out who murdered Archbishop Romero.

will be maintained, and Labour would also reintroduce capital spending on a three-year basis.

Allowances for tertiary students would be increased by A\$8 to A\$54 a week, which is well below the Australian Union of Students claims for A\$83.40 a week.

Of course major expenditure on universities and CAES (about \$1,100m a year) occurs through recurrent funding and the Labour policy promises only "a small increase" in this area.

Although the government has strongly favoured the third arm of post-secondary education—technical and further education—Labour promises to increase recurrent expenditure on TAFE (at present about A\$55m a year) by A\$10m.

The shadow Education Minister, Senator John Burton, in Labour's platform, looked back fondly to the time of the last Labour governments—1972-75 and noted that during its brief time in power it had accepted responsibility for the complete funding of universities and CAES, abolished post-secondary fees, introduced the tertiary allowance scheme and established TAFE on a national footing.

"The importance is to develop a three-year programme which is slightly allocated in terms of trends, and to allow the education system to feel a little freer to develop," Senator Burton said.

Three days later, the university alleged, three squadrons of the Salvadoran Anti-Communist Army dynamited and set fire to the Jesuit University's print shop.

"Many teachers of religion, preachers, priests, nuns and monks have been tortured, threatened, deported or obliged to go into hiding. All of this is an indication of the religious persecution going on in the country," the statement says.

Among those murdered was San Salvador's Archbishop Oscar Arnaldo Romero, shot to death on March 24 as he was celebrating a funeral mass in the capital. Mr Romero was an open critic of the violence sweeping El Salvador and a champion of the poor.

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# Colleges split over tactics to resist state takeover

from our North American editor

One of the most bitter, and to the outsider, most obscure controversies in American higher education today revolves around accreditation. The time-honoured process by which non-governmental accrediting agencies certify that colleges and universities meet certain minimum educational standards is coming under attack from several sides.

The fundamental reason is that federal and state governments are feeling more and more internal and external pressure to become involved in the accreditation and evaluation of academic institutions. Colleges and universities are naturally resisting this pressure, which they see as a basic threat to their autonomy.

Unfortunately the higher education community cannot agree on the best tactics for resistance. The National Association of Independent Colleges and Universities (NAICU), an organisation of 830 private institutions, has broken ranks with the other higher education associations in Washington, and is actively opposing proposals they have made to get the federal government out of the accreditation scene. It believes its approach is "wholly unrealistic, almost self-destructive" because it asks the government to step aside before academia has established proper self-regulation.

Some of the external pressure on accreditation comes from the federal government. In 1975 they have been shattering to get the federal government out of the accreditation scene. It believes its approach is "wholly unrealistic, almost self-destructive" because it asks the government to step aside before academia has established proper self-regulation.

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who are entitled to government protection against abuse at the hands of unscrupulous or incompetent colleges and universities. Many consumer activists believe that the traditional accrediting agencies are not really ensuring that the institutions or programmes that receive their seal of approval match up to the necessary standards.

There are two types of non-governmental accrediting agency. Six regional associations accredit colleges and universities as a whole, taking into account the institution's overall educational quality and financial health. The other type, specialised or professional associations, accredit individual programmes, departments or schools within the institution.

Both types, institutional and specialised, are voluntary bodies financed and run either by the member institutions (in the case of the regional associations) or by professional organisations. Since 1975 they have been shattering to get the federal government out of the accreditation scene. It believes its approach is "wholly unrealistic, almost self-destructive" because it asks the government to step aside before academia has established proper self-regulation.

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● If the applicant meets the standards, the agency adds it to its list of accredited programmes or institutions.

● Periodically (at least once every 10 years) the agency re-evaluates the programmes or institutions on its list to ensure that they are worthy of continued accreditation.

The only public outcome of the process is the appearance of successful applicants on the accredited list. Rejections are not normally published, nor is the accrediting team's report unless the institution itself decides to do so, because it is considered confidential.

In fact the proportion of institutions which lose accreditation is very small, which leads to charges that the whole thing is a whitewash by the colleges and universities. But defenders of the system reply that deficiencies uncovered by the accrediting team and pointed out to the institution are not normally confidentially reported.

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clations which it "determines to be reliable agencies as to the quality of training offered by educational institutions and programmes". In order to be eligible for funds (and many, though by no means all, federal education programmes, an institution must be accredited by an agency approved by the government.

The seven major higher education associations in Washington sent the new assistant secretary for postsecondary education, Albert Boyker, proposals that would put an end to the government's role in evaluating the accrediting agencies.



The United Nations has held its second world women's conference. Charlotte Barry reports

## Action plan to stamp out male privilege

In the past few years women's rights in education have become generally accepted throughout the world. It has also become apparent that both formal and informal education and training are key factors in determining the level of involvement of women in developing countries.

Their involvement will have a marked effect on social progress and in reducing the gap between socio-economic groups. Literacy and the lack of basic skills are regarded to be among the basic causes of the vicious circle of underdevelopment, low productivity and poor conditions of health and welfare.

But for countless millions of women in the developing countries, the barriers of illiteracy are too high to take place in Europe and North America has scarcely begun.

This sad state of affairs has been discussed over the past two weeks at the world conference of the United Nations "Decade for Women" in Copenhagen. Delegates have drawn up a revised programme of action based on a review of the first world plan of action drawn up at the first women's conference held in Mexico in 1975 to mark International Women's Year.

Then, 14 minimum objectives and nine specific areas for action to upgrade the status of women were decided. Five years later, the world is still a long way from achieving these objectives. In some countries there has been a better life for women, stagnation and deterioration describes their condition in national life elsewhere.

The background report on education, for example, states that illiteracy rates in 1975 were 50 per cent in the United States, 20 per cent in the United Kingdom, 10 per cent in the United Nations questionnaires and reports of UNESCO activities. It includes analysis of the progress made in achieving the objectives in the field of education and training between 1975 and 1978.

Although recognising the tremendous economic, social, cultural, political and geographical gaps that exist between nations in the world, it suggests changes that can be made on a national and international scale to improve the dis-

parities and inequalities that exist in their education. Education's vital role in realizing the goals of the decade for women is self-evident, says the report. "The present gap in women's access to this powerful process perpetuates feelings of inequality both among women themselves and in their relation to society. Investment in women's education is considered essential if their creative participation in development is to be enhanced and if they are to contribute more effectively to peace."

Today, still nearly two out of every three illiterate adults in the world are women, and in some countries female illiteracy rates are actually on the increase, reaching 85 and 90 per cent in Africa and the Arab states, compared with an average of 60 per cent for all developing countries.

Illiteracy is markedly higher in rural areas, where literacy campaigns have failed to reach a significant number of women. In Asia, 45 per cent of women in urban areas are illiterate, compared with 60 per cent in rural areas.

Data in the report reveals that in spite of their increased enrolment in formal education between 1975 and 1978, women are still in the minority in most parts of the world at the primary, secondary and higher levels. In some countries, the proportion of women entering secondary education has declined.

In 1978 women represented nearly half the students in primary education in developed countries but in Africa female enrolments ranged from Botswana (66 per cent) to Sierra Leone (38 per cent). In Asia, from Singapore (87 per cent) to Sri Lanka (49 per cent). At the secondary level, most developed countries and more than 20 per cent of the African countries reported an increase in women's enrolment, but Asia, Latin America and the Middle East reported a decline. Enrolments in Africa ranged from Benin (12 per cent) and the Ivory Coast (20 per cent) to Lesotho (58 per cent) and Botswana (72 per cent). In Asia from Pakistan (22 per cent) and India (50 per cent) to Singapore and Sri Lanka (both 50 per cent).



Female illiteracy in the Third World reaches 85 per cent.

At the higher level, female enrolments developed countries ranged from United States (23 per cent) and Spain (38 per cent) to the Soviet Union (52 per cent) and Sweden (63 per cent). In developing countries in Africa, it ranged from the United Republic of the Congo (15 per cent) and Mauritius (16 per cent) to Lesotho (45 per cent) and Swaziland (39 per cent). In Asia from Singapore (73 per cent) and Papua New Guinea (26 per cent) to Sri Lanka (54 per cent). Latin America reported near equal participation.

In the area of technical and vocational training, the greatest increase shown among women was in entrepreneurship and management skills. Enrolments for not only industrial but agricultural skills programmes were greater in developed than developing countries where agriculture is the essential component of the economy and women are involved in large numbers.

Efforts to increase co-education and provide access to the same curriculum vary over the time period. Surprisingly, co-education is more widespread at primary than secondary levels and in developed countries.

In technical and vocational education, girls are diverted towards domestic activities. African and Asian countries primary education is formal education rather than vocational, which could help a report.

What is important is the extent of non-formal and education and remedial programmes which include health and the environment, a rock which arose at the resumed meeting.

Since the first plans were laid, the economic climate has become increasingly chilly and what then seemed distant goals are now being reassessed.

Chief among them is the question of redundancy and essentially the 1973 agreement reached between the ILEA and the Council of Local Authorities, which handed over its task of negotiating conditions of service to the NJC.

The agreement, made when large-scale redundancies seemed unlikely in an expanding service, is a remarkably generous stipulation that a year's notice would be given, laid down a full range of redundancy benefits, and provided for a full range of training and development opportunities.

At the end of the day, it is likely that a dispute will arise over the question of redundancy. The NJC's last meeting, only 33 said they had adopted it locally. While 56 said they would follow its recommendations, a small core of 15 said they would not.

## Life among the artists

Marcel Duchamp said that what he chose to call art was arbitrary. He presented four marbles and 33 seconds of silence as art, and more recently, soiled nappies were shown in perspex boxes in the name of art.

Exactly what constitutes valid artistic activity and how standards of evaluation are achieved are issues that have increasingly become controversial. As traditional notions of artistic form have come under attack and as pressures for a more accessible and participative art have increased, the boundaries of art have become increasingly blurred.

This month the pedagogical New University Conference, which is a residential conference to discuss the nature of excellence in the arts, academics and art administration, is being held at the University of Warwick. The conference is a continuation of a series of similar conferences held in the past few years, examining the health of music, drama, literature and the visual arts.

The proceedings were congenial, the hosts delicious and the company fascinating. Whether any of the participants came away with a much clearer idea of the boundaries of artistic endeavour or of the criteria for artistic judgement, however, is less certain.

Although most people agreed that it was necessary to talk, meaningfully, about something called "the arts", there was less common ground about how it should be defined.

### Simon Midgley looks at the state of the arts through the eyes of the experts

When asked, they rarely came into focus. However, during the course of the conference, the arts became a central theme for the discussion and the nature of its vitality.

Richard Hoggart, warden of Goldsmiths' College and vice-chairman of the Arts Council, launched the discussion with an appeal for a continuing debate about what critical standards might be.

There was a "crisis of relativism", he said, in the arts today and the Arts Council was right in the centre of it. This manifested itself in a lack of making distinctions, a preoccupation with "the new" and a loss of the ability to judge.

The value of communal artistic activity was frequently stressed at the expense of solitary artistic endeavour. The older, more traditional forms of art were frequently dismissed as being out of touch with the needs of the modern world.

There was, in short, a profound confusion about the whole notion of art. This did not help that whole new group of people who were being described as "cultural entrepreneurs" who were working for Unesco and for the Arts Council whose job it was to distance public taste in support of the arts.

### David Jobbins assesses the tasks facing the national joint council on conditions of service

#### New body is put to the test

Union leaders and management met again next week to discuss the status of a national agreement on redundancy procedures for college and university lecturers.

The talks not only have profound implications for many of the 300-plus lecturers in the public sector currently facing the prospect of redundancy—but for the credibility of the new national joint council on conditions of service as a first step towards replacement of the Burnham machinery by bilateral collective bargaining.

Both sides have the agreed aim of repeal of the Remuneration of Teachers Act, and view the joint council as the most appropriate forum within which not only conditions of service but ultimately pay should be determined.

But the first few months of its existence have shown signs of doubt as to whether the joint council can eventually assume this role. An unfortunate question mark now hangs over the future, with union leaders publicly expressing doubts about its ability to represent their members' pay packets to a body the management side of which may not be able to "deliver the goods".

After an historic inaugural meeting earlier this year, its first work began last month when the two main representatives turned up and it was clear that no firm decisions could be made. Management officials braved the inevitable accusations that the new body was being treated with contempt, but it was hard to conceal that a major blunder had been committed.

### Tim Gopsill reports on the relaxed atmosphere at Kingsway Princeton College, London

#### The anti-security approach

Test the security system at Kingsway Princeton Further Education College, yourself. Stroll in the glass-fronted entrance of the new campus in Gray's Inn Road, near King's Cross, central London, turn right, and walk the length of the corridor to the office marked Student Adviser. No one will stop you. There will be groups of youngsters strolling around, chatting. A generally relaxed atmosphere.

The adviser, Max Johnson, and his "assistants" community youth workers Loxley English and Marie-Ange King, are not armed. Walk down the corridor, past the reception desk, manned by a couple of caretakers, turn right, down the stairs, to the canteen. One or more of them might be there. Or outside, in the garden. Or back up the stairs, turn right, into the common room, and they'll be there.

The common room is brick, painted an oppressive dark blue. It has table football and hard, classroom, tables and chairs. It will be a large, airy, by black you're looking at, a King could be serving the coffee.

Kingsway Princeton has run its "anti-security" system for two academic years. It has done so despite some warnings in the ILEA, which has wanted it, like other central London further education colleges, to install regular security arrangements, with guards on the doors, identifying cards, and that sort of thing.

The system has Max Johnson and his team circulating, rather than patrolling, the two campuses (a mile or so apart). They get to know not just the students, but also the regular "intruders" who mostly are employed black youth who work on the college, for want of elsewhere to go, and have caused problems at other colleges with thefts, assaults and general disruption.

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# Manpower planning

## Playing the USSR numbers game

Signals from Elizabeth House suggest that, once more, the idea of manpower forecasting as a basic criterion for higher education provision is under serious consideration. Last time, during the Crowther Hunt era, it was the "broad brush" that this time it seems to be a "broad brush" which DES officials are being asked to devise.

Manpower planning has not been used as a general basis for planning higher education in this country since the approach was rejected by the Robbins committee. The two main exceptions are the training of teachers and of doctors, neither of which are very consuming exercises.

A similar pattern of limited manpower planning has been followed in other Western countries with one or two somewhat more ambitious exceptions. In France the number of places in many of the *grandes écoles* is based upon ideas of the number of senior professional jobs likely to be available in the relevant public sector activities, and in Sweden the "professionally oriented" faculties have similarly been restricted to a size for which employment in the profession concerned can virtually be guaranteed.

In Eastern Europe, on the other hand, manpower planning has been central to higher education policy. The Soviet Union and its satellites have two advantages: first, having predicted a certain number of jobs for say, mechanical engineers, or their centrally planned economies can ensure that just the right number of vacancies is provided; and, second, practically all graduates with the requisite qualifications are induced to fill the corresponding vacancies. The rules of this game eliminate the possibility of visible surpluses or shortages of labour to confound the planners' intentions.

As far as individual students are concerned, both the Western approach of following higher education to develop on the basis of individual demand and the Soviet approach of planning on the basis of manpower needs work reasonably well so long as economies are expanding. In the West, the labour market adjustments ensure that most graduates get jobs in reasonably productive occupations; while in the East, the expansion of job opportunities means that most school leavers are able to obtain their first choice. Any problems that do arise are problems of shortage rather than of surplus—so the damage is diffused over whole economies rather than concentrated in particular industries.

Difficulties occur when economies grow less rapidly. In the West, there is concern about graduate unemployment and "mismatch" between qualified manpower output and labour market needs. In centrally planned economies, competition for entry to university and polytechnic becomes more and more intense. Thus, both types of economy have begun to face a similar problem: people with apparently legitimate claims to higher paid jobs are being excluded from these jobs. In one, pressure builds up at the point of exit from education and forces into the labour market; in the other, it occurs at the point of entry to higher education. The results appear to be leading towards a convergence of policy: in the East, demand considerations are beginning to lessen the reliance on manpower planning; while in the West, manpower planning is being pushed as a way of controlling demand.

Much of the debate to this country begins and ends with the issue of financial resources. Manpower planning groups claim that manpower planning is inconsistent with the true function of education: employers take the view that the education system is a just claimant on the public purse, and that the taxpayer's expenditure should be justified in principle by the contribution that higher education makes to the national economy. When higher education is seen as a public claim on the public purse, it is not surprising that it is seen as a right to expect something more than the self-development of individual students. Since it is by

now widely agreed that higher education has so far done little to help promote greater equality (there are, in some circles, doubts about whether it should try to do so), the provision of skills is perhaps its most obvious socially useful outcome.

There are also more practical considerations. A very high proportion of school leavers who enter higher education expect it to contribute directly or indirectly to their future job opportunities. However, if manpower planners have a good case in principle, they are on shakier ground in practice. A basic difficulty is that in order to be of use, forecasts need to be made for long periods into the future. The normal first degree course lasts three years, planning a change in intake takes several years more, and the average graduate is employed for about 40 years. The current position of the DES appears to be that such difficulties can be overcome by adopting a "broad brush" approach aimed at sketching the broad categories of manpower requirements such as scientists, technologists and social scientists.

However, in a specialist world a trained chemist will find it little easier to turn himself into an electronic engineer than will an economist or a mathematician. Moreover, in a wide range of occupations, in management for example, is far from clear whether a first degree background in engineering, or accountancy, or social sciences, or even the humanities or classics, is likely to be more useful.

Many recruiters say the subject of a first degree does not matter so much as evidence of a good mind and an ability to exercise judgment. Conversely, when recruiters want a technical specialist, they want someone with specific specialist skills. "Broad brush" falls badly between these two techniques. It does not offer enough guidance for the real specialist skills and it is unnecessarily prescriptive as far as a wide range of occupations is concerned.

There are two other reasons why it is difficult to make detailed long-term forecasts of qualified manpower needs. The first is the unpredictability of technological change. Even though we have all convinced ourselves of the inevitability of the micro-processor revolution, there is considerable disagreement even among experts about its timing and impact. The second reason is that the demand for qualified manpower opportunities is changing.

Another difficulty is that, with few exceptions, the number of people with different qualifications required in an organisation or a sector of economic activity is not technologically fixed but depends on the relative earnings of different grades of staff. To take a seemingly clear-cut case: in a maternity hospital there is an apparently predictable need for consultant gynaecologists, junior doctors, trained midwives, assistant nurses, administrative and office staff. But what happens if the maternity hospital is a success? Much of the work they do can be performed by midwives. If a very plentiful white acre can be performed by midwives, it is not surprising that they will find themselves doing much of their own paperwork. A baby can be delivered (and usually is) in the United States) by an obstetrician with many years' training or (as in most of the Third World) by a local midwife with a few weeks' training. Which of these technologies is appropriate depends almost entirely upon economic circumstances.

Any sophisticated proponent of manpower forecasting accepts that attention to the elasticity of the machinery of countries such as the Soviet Union. In such countries manpower budgets are an integral part of all investment programmes, an organisation which has no, or a very small, claim on the public purse is not going to be able to attract the necessary funds. Large transfers of capital

and economists construct detailed manpower balances for the whole economy and subject these to the expert opinion of practising managers before they are integrated into economic plans. But the most satisfactory answer to criticisms of the practicability of the manpower approach is to point to the weaknesses of the widely accepted alternatives. Attempts to forecast the demand for higher education by students have not been conspicuously successful. During the mid-1960s forecasts fell short of the actual demand for places by over 30 per cent over a five-year period, while between 1970 and 1980 the actual number of students seeking higher education fell short of official 1970 projections by about 60 per cent. Manpower forecasts could not do much worse.

Discussions of manpower planning in Britain rarely make it clear whether the intention is to limit the total number of places according to estimates of qualified manpower needs or whether the intention is to allow the overall size of the higher education system to be determined by student demand, but to use the "broad brush" concept to decide the proportion of students who should be studying different subjects. The Soviet Union quite explicitly adopts the former course and is prepared to accept intense competition for entry to full-time higher education. In France, on the other hand, the *grandes écoles* are rationed, but university places are provided more or less in accordance with student wishes.

Employment opportunities for many kinds of qualified manpower vary in response not only to long-term demographic, social and technological changes but also to short-term fluctuations—in economic activity. In Eastern Europe, manpower planners claim to ignore what they believe to be short-term fluctuations. The weakness of this expedient is that a short-term fluctuation may turn out to be a long-term trend. The experience of the teachers' striking colleges in 1966 and 1967 is a warning against the problems that may result from attempts to follow qualified manpower demands too closely.

It was a former permanent secretary at the DES who told earlier this year that our system of higher education allows each student to be his own manpower planner. This was the comment of the servant of a system orientated towards meeting individual demand. It is not an encouraging claim. Even though there is substantial evidence that school leavers are very responsive to changes in relative earnings and employment opportunities, when deciding whether to enter higher education, they are not subjects to study individual students but to experience in evaluating labour market signals.

If such adjustments are left to the interplay of market forces, they may turn into fluctuations of the "colourful cycle" type because students are too sensitive to reported changes in earnings and employment prospects. Shortages of, say, engineers lead to good job prospects for many students and a large number of them will enter the profession. During economic expansion, any fluctuations occur against a rising trend of demand for all types of labour, and the fluctuations are likely to be small. However, if demand is stagnant, however, a considerable number of people may be taken into the labour market who will find themselves doing much of their own paperwork. A baby can be delivered (and usually is) in the United States) by an obstetrician with many years' training or (as in most of the Third World) by a local midwife with a few weeks' training. Which of these technologies is appropriate depends almost entirely upon economic circumstances.

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end of compulsory schooling—since entry to higher education guarantees a job on exit. Our economy requires potential students to be given information not only on entry qualifications, curriculum and job content, but also on employment prospects several years hence, on which they must then gamble. The need for extra information ought to imply a greater provision of advice rather than less.

The other lesson we can learn from Eastern Europe is the wide spread system of part-time continuing and recurrent education in helping to update obsolescent skills and in meeting the needs of technological and social change is obvious enough. However, much of the interest in Eastern Europe derives from an interest in reducing the inequalities of employment and, in particular in blurring the sharp divide between trained and untrained manpower and providing opportunities for social mobility for individuals during their working lives.

Such considerations are likely to be even more relevant in the West. In a free economy, the rationing of places according to estimates of qualified manpower requirements implies the perpetuation of existing inequalities of income. Estimates of future needs for doctors, for engineers, for any other category of highly qualified manpower, implicitly assume that existing salary differentials will continue.

Thus, to be allocated a place in higher education or, in one of its restricted subject areas, assures the lucky student of a lifetime career in an occupation where the supply of qualified people is being deliberately restricted. The most notorious example of this is, of course, the medical profession in the United Kingdom. Such a career adaptation and the provision of career guidance might then turn out to be essential safety valves, even for governments with little or no commitment on principle to equality of opportunity.

What are we to conclude from all this? It is likely conditions of higher education and public expenditure in 1980s, it will be impossible to brush aside the demands for some kind of manpower orientation to our higher education system. However, rigid centralised manpower planning, even of the broad brush variety, is not feasible. It is paradoxical that a government which in all other respects is committed to the free market is showing signs of wanting to adopt an Eastern European type of solution to this particular problem. The DES might find it more useful to order a series of monitoring and publication of changes in relative salaries and unemployment rates and in entry rates to different subjects of study than to try to predict optimal manpower structures five, ten, or 15 years ahead.

Finally, if we are to ration places according to estimates of future manpower needs, any restrictions should certainly be accompanied by some form of graduate tax-related income, so that those who earn high incomes as a result of being allocated a scarce higher education place can make some financial contribution to the rest of society.

Graduates who would be fairer to the rest of society would be those who would be frequently making mistakes. Those who result in unanticipated shortages, and delays, in the labour market, will be those who find themselves in a position of being a "broad brush" in the labour market. It is not surprising that they will be those who are taken into the labour market who will find themselves doing much of their own paperwork. A baby can be delivered (and usually is) in the United States) by an obstetrician with many years' training or (as in most of the Third World) by a local midwife with a few weeks' training. Which of these technologies is appropriate depends almost entirely upon economic circumstances.

Whether or not Britain adopts a formal manpower planning approach, there are two lessons we can learn from the East. First, in a free economy, the rationing of places according to estimates of qualified manpower requirements implies the perpetuation of existing inequalities of income. Estimates of future needs for doctors, for engineers, for any other category of highly qualified manpower, implicitly assume that existing salary differentials will continue.

## Swings and roundabouts of shortages and surpluses

The Select Committee on Education seem to be concerned at the lack of any effective control by the DES over the numbers of graduates in each field or so it appears in press reports of their session. The article by their chairman, THES (February 8, 1980), is one of what is written and said on this issue, such as the claim that technicians are more responsible than universities to Britain's "not there are massive unmet needs" that it is possible (a) to adjust the numbers of graduates in each field and (b) accordingly, so that the two validity of these assumptions is self-evident to those making it and any doubt as to its validity is wilfully blind to the facts. Nevertheless, it is worth looking at what evidence there is.

An initial problem is that talking of meeting Britain's needs rarely specifies what they are. These to be, presumably, the needs of the economy, and those of the professions, and those of the arts and social sciences. It is not clear what is meant by "meeting the needs" of the economy, or of the professions, or of the arts and social sciences. It is not clear what is meant by "meeting the needs" of the economy, or of the professions, or of the arts and social sciences.

There is also a conceptual problem about the meaning of "meeting the needs" of the economy. One meaning of a need for a kind of graduate is that there are jobs waiting for them. Others, however, those speaking of the need for a kind of graduate may use "need" normatively in the same way in which one might say "we need more of this" or "we need less of that".

This difference in meaning is crucial. The failure to recognise it results in a lot of confused thinking and in discussion that is at cross purposes. The first meaning of "need" is that there are jobs waiting for them. The second meaning is that there are jobs waiting for them. The first meaning of "need" is that there are jobs waiting for them. The second meaning is that there are jobs waiting for them.

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Of course we are all entitled to our own theories about what the needs of the economy are. But if we are to have any kind of manpower planning, we must have some way of measuring the needs of the economy. The first meaning of "need" is that there are jobs waiting for them. The second meaning is that there are jobs waiting for them.

But what distinguishes the selective approach from the restrictive approach is the implication that there ought to be restrictions on entry to other fields. The selective approach is the restrictive approach. The first meaning of "need" is that there are jobs waiting for them. The second meaning is that there are jobs waiting for them.



If employers hold stubbornly to the view that they know their own business better than all the people who are telling them how to run their firms, they will not take on the kind of graduates they are told they need—or, more likely, will take them on and use them for different work. If school-leavers, and those who advise them, do not see employment prospects ahead, they will be less likely to accept the pressures that would force them from one field to another.

So we come back to employers' demands for labour. The first point to notice about these is that there is a difference between what employers individually and their organisations collectively say they need and what they actually try to recruit. I shall be looking only at the latter.

The main ways of talking whether there is a shortage or a surplus of any kind of graduate are firstly by the extent of unemployment among graduates, and secondly by the extent of unemployment among graduates. The first meaning of "need" is that there are jobs waiting for them. The second meaning is that there are jobs waiting for them.

The only comprehensive figures for unemployment, though a little old, do dispose of the idea that Britain has long suffered from a shortage of scientists. The 1971 Census found 5.2 per cent of the entire economically active population unemployed. Of this, 2.2 per cent were unemployed, and the figures for scientists and technologists (2.1 per cent and 1.8 per cent respectively) were not very different from the average.

The changing shape of the graduate employment market is most easily followed through the sets of figures collected by the careers officers showing the first jobs entered by graduates—for some years these have been available for both polytechnic and university graduates in a comparable form. The numbers show unemployment at the end of December, amongst those with degrees, working in the United Kingdom, social science graduates were paid slightly more than arts and science graduates, and technology graduates were paid rather more again. An especially interesting feature of our results was that, in industry and commerce, scientists were paid more if they had left the kind of work for which their qualifications had specifically trained them. And had some into management sales. Other sets of figures show similar patterns.

The data on the kinds of jobs scientists and engineers take when they leave university are too complex to present here. However, it is a good indication of the lack of any general shortage of scientists for scientific work that over a quarter of the university graduates with first degrees in science in 1978 went into commerce, mainly accountancy.

The results of the recent Department of Employment survey of 1970 graduates show a massive movement of engineers out of engineering. By 1977 nearly a third of those whose first job was as an engineer were doing something different. If there were really a shortage of engineers, employers would, by offering better salaries and prospects, be holding more of them in engineering.

All these indicators point the same way. Up to 1978 there has been no sign of a shortage of scientists for many years; nor had there been much sign for some years of any serious shortage of graduates in the arts and social sciences. In 1979 and 1980 there have been some indications that the market for scientists, and even more for engineers, has picked up. However, two years do not make a trend, and we have to be cautious about any projected change in the demand for new graduates.

university graduates still unemployed at the end of December show very little variation between fields of study. The figures for arts, social studies and pure science at 6.6, 6.1 and 6.2 per cent respectively are virtually identical but applied science came slightly lower at 3.4 per cent. The figures for those in temporary employment are a little more difficult to interpret—they are the people who have a job but have decided to leave their names on the careers services books in the hope of something better. They show a slight graduation by subject area: 7.6 per cent for arts, 6.1 per cent for social studies, 5.0 per cent for science and 2.3 per cent for applied science.

Taken together, these figures suggest that up to 1978 there had not been any real problem of unemployment among graduates, even in the case of any general shortage of scientists for scientific work that over a quarter of the university graduates with first degrees in science in 1978 went into commerce, mainly accountancy.

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states was due to the hope that the economy would soon revive.

Why, one may ask, has the belief that there is a shortage of scientists and engineers and that the universities should be doing something about it survived in good health for so long? One explanation is the schools' inability to recruit enough graduates scientists. However, this is a separate problem which seems to result to a large extent from the reluctance of people with the personally characteristics usually found in scientists to teach in the free and less disciplined atmosphere of the school or college.

Another reason for this belief is the shortage of scientists is that there is indeed a shortage of the most able scientists, as there is of the most able in every field. On the whole, however, this belief seems to spring from ignorance of the facts and a substantial ignorance of the purpose and functions of a university degree. Though some of those who graduate in, say, botany, chemical engineering, economics, history and law will become professional botanists, chemical engineers, economists, historians and lawyers, many in each field will not; and of those who do enter the professions to which their degrees seem to lead many will move to other work during their careers.

However, a good degree course (and I am not prepared to swear that they are all good); by making a student look at a subject in depth and understand its theory, teaches him to learn, to think, and to be adaptable. A student of leather technology or gas technology, who has learnt only the facts about leather or gas will be unemployed if the industry for which he has trained does not need him. But one who has achieved a deep understanding of his subject will be able to take to a different job. The trained mind that it needs.

Given that we cannot predict how many people are needed in any specialty next year, let alone 20 years on, such adaptability is greatly needed. This is reflected in the point Sir Monty Flinniston made (THES, June 20) when he argued that more young people would enter engineering courses if it were when they saw these as the route to a number of worthwhile and rewarding careers (not a plural). The effect of his proposals for changes in the school curriculum; by delaying choices of subject and giving students a wider education would help to increase their adaptability. That kind of planning for uncertainty could work where planning for definite targets would not.

To bring the argument together, the numbers shows problems of science that are almost insuperable. The failure of the numbers of students in Russian and in science to increase shows the wastefulness of a centralised system that tries to increase student places against the wishes of the students.

A study of the actual demand for graduates, however, shows that the universities, by changing courses to keep up with knowledge and the needs of the labour market, have been supplying what employers have wanted. This matching of supply and demand is partly the result of individual choices of subjects as a source of future income. The use of the market place to determine the number of graduates in each field, as Flinniston pointed out, works best when information about the state of the market etc flows freely. Also it is hampered by the lag between the decision on the subject of a course and the time when it begins to take effect, which begins at 14, and the graduate's emergence on the labour market seven years later. That it nevertheless works is a result of the 1949-50 decision to open up a wide range of courses and the large pool of people who have graduated in a field in which they do not work. Firms that are seriously short of engineers can be sufficiently "sufficiently" large to attract a sufficient number of graduates to do the job.

In 1979 and 1980 there have been some indications that the market for scientists, and even more for engineers, has picked up. However, two years do not make a trend, and we have to be cautious about any projected change in the demand for new graduates.

Garrett Ridd

The author is a reader in sociology at the University of Essex.







# BOOKS

from facing page

In another sense, it all depends where you stand. One person's materialism is another person's

**Pope John Paul II faces huge crowds as he holds a pontifical mass on his visit to Poland, an officially atheist country.**

churches which propound no laws, holy priesthoods. Only species of intellectuals for whom Marx

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...to 20 millions.

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Dr Yeo is lecturer in history,  
University of Sussex.

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## BOOKS

## Standard time

Greenwich Time and the Discovery of the Longitude  
by Derek Howse  
Oxford University Press, £7.95  
ISBN 0 19 215948 8

"For called, our naves melt away" — as said Kipling, at the end of the nineteenth century, on the forthcoming decline of British naval power. Yet, only a decade before he wrote this, the long influence of Britain on maritime affairs had received its culminating recognition in the selection of Greenwich as the new point of longitude. Derek Howse's new book pivots round this event; yet, at the same time, it points up an ambiguity. Longitude and time, as the title tells us, are related, but distinct. If the story of longitude reached a peak in the nineteenth century, the story of time continues as a twentieth-century saga; yet recent developments have taken away some of Greenwich's primacy.

The need for accurate longitude determinations became pressing as steam navigation moved out from the coastal regions. In England, the navigation by Charles II that much of the book data required for finding the longitude was lacking led, in 1675, to the foundation of the Greenwich Observatory. It was recognized from the start that improvement of navigation must be a long-term endeavour. But the need to solve the longitude problem became increasingly urgent. A number of navigational disasters in the period around 1700 helped ensure the establishment in 1714 of a special fund of £20,000 (the equivalent of nearly half-a-million pounds in 1975). It was to be used to reward the person, or persons, who discovered a practical method of measuring longitude at sea.

The subsequent, ultimately successful attempt to develop both astronomical methods and accurate clocks for the positional measurement at sea have been the subject of much research and writing. The efforts are lucidly summarized in this book, but an important distinction is drawn between the two principal approaches. The French, who were little, if at all, behind the English in developing accurate clocks, in perfecting the astronomical methods, however, the British *Nautical Almanac* preceded any similar compilation elsewhere. The *Nautical Almanac* was naturally based on the longitude of Greenwich; as deep-sea navigators round the world began to compute their positions relative to it.

By the early nineteenth century, the problem of determining longitude with reasonable accuracy had been essentially solved. Almost immediately, a new problem with time came to the fore. The growth of railways led to rapid and frequent travel. Previously, the hours of each day were kept to 12 or 13, but now it became more and more inconvenient. From the mid-nineteenth century onwards, a standard time, based on Greenwich, was introduced throughout much of the British

railway network. This was distributed by the telegraph system (from the Greenwich Observatory, and so was naturally based on the time kept at Greenwich). Yet local time was not easily displaced—Greenwich time only received legal backing as the standard in 1880. One of the fascinating photographs in this book is of the clock on Tom Tower at Christ Church around 1860. It has three hands—one showing the hour and the other two the minutes in local and Greenwich time (a difference of about five minutes).

If variations in local time created difficulties in Britain (where the maximum difference from east to west is only about 30 minutes), the problems in North America were obviously much greater. For example, Pittsburgh had six different time standards for the arrival and departure of trains. It was therefore agreed in the 1870s that the USA should be divided up into standard time zones. It was found that the boundaries occurred most conveniently if they lay along meridians which were an integral number of hours west of Greenwich. So, by the time it became essential to choose an internationally agreed zero meridian—in the mid-1880s—not only were most sea charts based on Greenwich, but an increasing number of longitudes and time zones on land. With very little dissent (only San Domingo voted against), Greenwich became the zero of longitude. 'It remains today in the general understanding that, in terms of time, the position is now much more complex.'

In time measurement, it was always assumed that the Earth spun regularly on its axis, so that the length of the day remained the same. During the first half of the twentieth century, as clocks increased still further in accuracy, this assumption was shown to be untrue. In consequence, the whole emphasis of time measurement has changed. Formerly, clocks were calibrated by the Earth's rotation; now the Earth's rotation is calibrated by clocks. Correspondingly, the old Greenwich time, based on astronomical measurements, has ceased to be the international standard. The time scales from 1875 have seen their gradual rise and more rapid fall.

It is possible to find minor faults with Derek Howse's account of all these changes. The importance of the time standard at the beginning and the description of recent time measurement at the end are well written, but it is difficult to imagine that a better book on this topic could possibly be provided for the general reader. It is a well written, excellent, illustrated and nicely made book—altogether, highly recommended.

A. J. Meadows

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## The geography of fuel

A Geography of Energy in the United Kingdom  
by John Fearnle  
Longman, £5.50  
ISBN 0 582 30007 X

To adopt Harold Wilson's words—a year is a long time in energy policy. The pages of *A Geography of Energy in the United Kingdom* are peppered with particulars. Many of these particulars—numerical forecasts, costs, administrative arrangements—have since been overtaken by events. Nevertheless, the general reader will find a wealth of useful basic information in these pages, and the aficionado will enjoy matching his wits against Fearnle's tumbling torrent of examples and commentaries.

Fearnle lectures in Geography at Huddersfield Polytechnic, and as a geographer he demonstrates an impressive acquaintance with many aspects of the energy scene not normally considered by the province of geographers. The writing is clear and uncluttered, and the text is interspersed with gaily diagrams and tables to amplify the argument. Each chapter is accompanied by extensive references.

The introductory chapter provides a brief survey of the reasons for concern in the part of government and policy makers about energy issues in Britain. Successive chap-

ters consider coal, North Sea oil and gas, nuclear electricity, the so-called "renewable energy resources", and energy conservation. The book concludes with a brief summary of what the author considers to be key aspects of present energy issues in the United Kingdom. The basic organization of the discussion is along traditional lines. What we are dealing with here is primarily the geography of fuel in the United Kingdom. Most of the book is devoted to the supply of fuels, either directly or by way of electricity. Very little reference is made to the actual use of fuels and electricity, and then only belatedly. However, within the context of this admittedly important reservation, the chapters devoted to fuels do give a useful overview of the physical resources and their economic and administrative contexts.

Each of the chapters on fuels begins by discussing the historical role of the resource and its recent changes. Specific controversies—the Selly and Belvoir coalfield developments, offshore oil licensing, the Windscale inquiry—are detailed. Unanswered questions are indicated, including those as to priorities and allocation of resources between different fuels and electricity, and the side-effects associated with their use.

The electricity industry is not considered separately, but only as

an adjunct to coal and oil and gas, nuclear electricity, the so-called "renewable energy resources", and energy conservation. The book concludes with a brief summary of what the author considers to be key aspects of present energy issues in the United Kingdom. The basic organization of the discussion is along traditional lines. What we are dealing with here is primarily the geography of fuel in the United Kingdom. Most of the book is devoted to the supply of fuels, either directly or by way of electricity. Very little reference is made to the actual use of fuels and electricity, and then only belatedly. However, within the context of this admittedly important reservation, the chapters devoted to fuels do give a useful overview of the physical resources and their economic and administrative contexts.

Walter C. Patterson

Walter C. Patterson is lecturer in the Department of Geography at the University of Hull.

## An opportunity to remain silent

Principles of Gene Manipulation: an Introduction to Genetic Engineering  
by R. W. Old and S. D. Primrose  
Blackwell Scientific, £10.00, and ISBN 0 632 00525 0 and 00527 7

Genetic engineering, or "in vitro" genetic manipulation as it is properly called, has had a tremendous impact in the past few years. Partly this is because it provides a means of retaining and/or augmenting the genetic constitution of living organisms in ways that had previously been thought impossible, partly it is also because the subject has received quite exceptional attention from the media, and the impact of science on society.

Our ability to "engineer" living organisms arises from the interaction of three totally distinct processes: the isolation and cloning of DNA, the synthesis of DNA, and the use of DNA to produce a living organism. This is a very exciting and rapidly developing field, and the book is a well written, excellent, illustrated and nicely made book—altogether, highly recommended.

A. J. Meadows

A. J. Meadows is Professor of Astronomy and the history of science at the University of Leicester.

## Controversial ideas about solar influence

The Strangest Star: a scientific account of the life and death of the Sun  
by John Taylor  
Penguin, £5.50  
ISBN 0 14 033326 3

Dr Taylor's main theme in this book, which is designed for the interested layman, is that the two faces of the Sun are not as simple as they are generally believed to be. The Sun is not a simple ball of gas, but a complex of many different layers and processes. The book is a well written, excellent, illustrated and nicely made book—altogether, highly recommended.

The book is a well written, excellent, illustrated and nicely made book—altogether, highly recommended.

linked with recent terrestrial ice ages. Although not an astronomer, Taylor has a good knowledge of the Sun and its influence on Earth. The book is a well written, excellent, illustrated and nicely made book—altogether, highly recommended.

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## Universities

## THE UNIVERSITY OF NEW ENGLAND

Australia

## CENTRE FOR BEHAVIOURAL STUDIES IN EDUCATION

## LECTURER

Applications are invited for the vacant position of Lecturer in one or more of the following areas: Psychology, social psychology, measurement, statistics and research design; social psychology of the classroom; human development. The position will involve postgraduate teaching and supervision of research together with a contribution to the undergraduate teaching programme. It is expected that applicants will have a demonstrated competence in research. The position is available from September, 1980.

The Centre for Behavioural Studies has a broad programme of graduate and undergraduate teaching and research within the general field of education, including: psychological and sociological aspects of education; special education and counselling; teaching in education; measurement; design; evaluation and computer applications.

Other conditions include assistance with travel and removal expenses, accommodation, health insurance, and a pension scheme. Informal enquiries may be made to Professor D. Fitzgerald, Head of the Centre for Behavioural Studies, The University of New England, Armidale, New South Wales, 2351, Australia, or to the Deputy Vice-Chancellor, The University of New England, Armidale, New South Wales, 2351, Australia. Applications should be sent to the Deputy Vice-Chancellor, The University of New England, Armidale, New South Wales, 2351, Australia. Applications should be sent to the Deputy Vice-Chancellor, The University of New England, Armidale, New South Wales, 2351, Australia.

THE UNIVERSITY OF NEW ENGLAND  
PROFESSOR OF EDUCATIONAL ADMINISTRATION

Applications are invited for appointment to a Chair of Educational Administration. The Chair has become vacant as a result of the retirement of Professor W. G. Walker as Principal of the Australian Administrative Staff College. The appointee will become Head of the Centre for Educational Administration, and will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

The Centre has an international reputation for its postgraduate programmes in school, school system and post-secondary educational administration, which it offers to both internal and external students. It also publishes the *Journal of Educational Administration*, the official journal of the Commonwealth Council for Educational Administration, and provides services in Australia and abroad through the Institute of Educational Studies for a period of five years.

The current professional salary is \$435,664 per annum. The University will pay travel expenses for the appointee and family. Informal enquiries may be directed to the first instance to the Dean, Faculty of Education in the University. Closing date 31 August, 1980.

## BERKELEY

## THE UNIVERSITY OF CALIFORNIA

## TUTORSHIP IN PHYSICAL GEOGRAPHY

A post of tutor, initially for one year, is available in the Department of Geography, University of California, Berkeley, California. The post is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## BRISTOL

## THE UNIVERSITY OF BRISTOL

## LECTURERSHIP IN POLITICAL SCIENCE

Applications are invited for the vacant position of Lecturer in Political Science. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

FACULTY OF SCIENCE  
CHAIR OF GEOLOGY

The Chair will become vacant in March 1981 when the Foundation Professor, Professor D. A. Brown, retires from the staff of the University. It is hoped that the appointee will be able to take up duty during 1981.

## CHAIR OF ZOOLOGY

The Chair will become vacant at the end of 1980 on the retirement of Professor S. A. Barnett. It is hoped that the appointee will be able to take up duty during 1981.

## University of Melbourne

## LECTURER (Limited Tenure)

## DEPARTMENT OF ACCOUNTING

Applications for this position should be sent to the Deputy Vice-Chancellor, The University of Melbourne, Parkville, Victoria, 3010, Australia. Applications should be sent to the Deputy Vice-Chancellor, The University of Melbourne, Parkville, Victoria, 3010, Australia.

## The Australian National University

## FACULTY OF ARTS

## CHAIR OF GEOGRAPHY

The Chair will become vacant on the retirement of Professor R. C. Johnson. It is hoped that the appointee will be able to take up duty during 1981.

## University of Western Australia

## Perth

## SHORT-TERM APPOINTMENTS IN INDUSTRIAL RELATIONS

The Department of Economics is seeking visitors for the academic year 1980-81. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## LECTURER/SENIOR LECTURER IN POLITICAL SCIENCE

Applications are invited for the vacant position of Lecturer in Political Science. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## BIRMINGHAM

## THE UNIVERSITY OF BIRMINGHAM

## DEPARTMENT OF SPANISH

Applications are invited for the vacant position of Lecturer in Spanish. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## THE UNIVERSITY OF NEW SOUTH WALES

Sydney, Australia

## VICE-CHANCELLORSHIP

Professor Rupert Myers, CBE, FRS, has indicated his wish to retire from the office of Vice-Chancellor and Principal on July 31, 1981.

Inquiries, applications and suggestions are invited by the selection committee which has been established to recommend an appointment to the University Council.

The University reserves the right to consider persons other than those who submit applications. Letters marked 'Confidential' should be addressed to the Hon. Mr. James G. J. Stansfield, Chancellor, University of New South Wales, PO Box 1, Kensington, New South Wales 2033, Australia (from whom further particulars are available) and should preferably arrive not later than September 12, 1980.

## UNIVERSITY OF PAPUA

## NEW GUINEA

## UNIVERSITY LIBRARIAN

Applications are invited for the post of University Librarian. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## UNIVERSITY OF THE WEST INDIES—THE BAHAMAS

## LECTURER/ASSISTANT LECTURER

## IN TOURISM IN THE HOTEL MANAGEMENT PROGRAMME

Applications are invited for the vacant position of Lecturer in Tourism in the Hotel Management Programme. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## BRADFORD

## THE UNIVERSITY

## LECTURERSHIP IN ELECTRICAL AND ELECTRONIC ENGINEERING

Applications are invited for the vacant position of Lecturer in Electrical and Electronic Engineering. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## UNIVERSITY OF THE WEST INDIES—BARBADOS

## PROFESSOR/SENIOR LECTURER IN FRANCE

Applications are invited for the vacant position of Professor or Senior Lecturer in France. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## BRADFORD

## THE UNIVERSITY

## LECTURERSHIP IN ELECTRICAL AND ELECTRONIC ENGINEERING

Applications are invited for the vacant position of Lecturer in Electrical and Electronic Engineering. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.

## OXFORD

## THE UNIVERSITY

## PROFESSORSHIP OF ECONOMICS

Applications are invited for the vacant position of Professor of Economics. The position is available from September 1980. The appointee will be responsible for the first instance. The Centre is one of four within the Faculty of Education.



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### General Vacancies

Applications are invited for appointment to a permanent position of Assistant Secretary for the above post, renewable from October 1, 1960, or as soon as possible thereafter. Salary on Appointment: £4,114.194 per annum, plus pension annuity with 1952-53 superannuation.

Application forms and further information may be obtained from the Secretary, Civil Service Commission, 1, Whitehall, London, S.W. 1.

The University College of  
 Wales, Old College, King  
 Street, Aberystwyth, Ceredigion, Ceredigion  
 (Ceredigion) SA1 1PW  
 15 August 1991

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**MERTYR IDREF**  
 COUNTY COUNCIL  
 CAREERS SERVICE  
 STUDENT CAREERS ADVISER  
 BURNLEY, A.P. 8, A.C. 3.34 10

Applications are invited from qualified and experienced career officers for the post which is based at the Military Careers Advisory Centre of the British Polytechnic. The post involves working with students living or studying in Staffordshire on degree and similar level courses. Preference will be given to graduates with knowledge or experience of

Application form and blanks from the County Careers Officer, County Hall, Haverford (Telephone 54242), for return two weeks after the appearance of this advertisement.

OF ART AND CRAFTS  
SES SUP  
T OF GRAPHIC ARTS

I for the post of Head of the Education and Printmaking: hold. Imp offers a course leading to a degree in Graphic Design, be Drawing and Lettering as the study of Typography. Grade III, but implementation could upgrade it to Grade IV. I hoped to make an appointment as soon as possible. Salary (£15,000) Inner London Allowance (£1,000) subject to formal approval. The available from the Senate and should be returned within the of this advertisement.

**ganisation**

# Research

Research Council has established research on work organisation projects available for up to five years. It supports one research centre or individual of research and invited individuals interested in undertaking work organisation. The Panel covers broad areas:

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## Failings that reinforce failure in the thesis business

Although much conscientious supervision of higher degree students exists, too many cases of inadequacy are known and criticisms of its quality are frequently expressed. They include supervisors who have done no research supervising research students; who rarely see their students; who are not familiar with the subject investigated. Of equally great concern, however, are the cases in which theses are completed and submitted at the recommendation of the supervisors but are then either failed outright by external examiners or require revision, often substantial, before acceptance. No information on the number of such cases seems to be available but personal acquaintance with some initially or completely unsuccessful candidates and with one who suggests the number is too great to be acceptable and should be reduced.

As the quality of continuous supervision varies, so does a supervisor's effective interest in ensuring a thesis's acceptance. In one case known to me a supervisor did not read his student's final draft before its submission. The examiner's rejection of the thesis was justified on grounds which the supervisor's reading would have foreseen — as became clear at the viva at which the supervisor was present. In some institutions the supervisor need not be—and sometimes is not—present at the viva. In one, at least, the supervisor and, if thought necessary by him, his academic superior, is always present and both are prepared to spend forcibly in support of the thesis. Since, in the latter case, staff will not support a thesis's submission until they are as sure as is possible that it is adequate, failures are virtually unknown. Contrast this procedure with that in which the supervisor, although present, appears as an examiner and subjects his student's thesis to criticism which he has not made before and, with the external examiner, ensures its rejection. In most cases, the supervisor is both responsible and not responsible for the student; he accumulates academic glory with his successes and loses nothing from his failures, for failure is always the student's fault; it is "his" thesis and he "chose" to present it.

At his viva the student hears the examiner's criticisms for the first time. These may be quite complicated, requiring him to jump from one place to another in his thesis and to justify items in several places on textual alterations or re-examinations with a sheaf of notes in his hand for reference; the student has only the quickness of his wits to deal with new criticism; but the viva is supposed to be an examination of his thesis, not his mental agility.

If the thesis is acceptable as it stands the student should consider himself fortunate. In many cases (five of six in my acquaintance) recent submissions the examiner insists on textual alterations or re-organization of sections and chapters. At times, especially in the latter case, there is an impression that the examiner is more concerned to have the thesis as he would have written it than to consider another's view of the material. Often, these alterations are sufficiently substantial to require that the volume be unsolicited and later rebound. Apart from inconvenience, unnecessary costs are incurred. If all theses were submitted loose-leafed (which in some institutions is the practice), alterations could be made at minimum cost and inconvenience, binding being done on acceptance of the thesis.

What if the thesis be rejected? Sometimes a lower degree can be recommended; sometimes not. If not, the student has spent several years of work, disburse money with out recognition. For some, promotion or new employment is no longer likely. Nowhere else in the system of education is failure so brutal, for examinations can be retaken, essays and projects re-submitted or replaced; but at the highest levels nothing can be saved even though it seems highly improbable that no postgraduate recognition can be attached to several years' work. Even where appeal or re-examination provision exists little can be gained. In one institution appeals are effectively discouraged by payment of £100, forfeited on failure of the appeal. In this particular institution "appeal" is defined as re-examination by the original examiners and an equal number of new examiners. Thus half the examining process is predicted against the student by reason of having failed him once. It is therefore most unlikely that the first verdict will be altered. At one university I was informed that, of seven re-examinations one resulted in a student's re-submitting the thesis; the other six candidates lost not only their appeals and their money but the masters' degrees for which they had all been recommended in lieu of documents. A re-examination is not a right but subject to a student's making a case for it, in writing, to the vice-chancellor, acceptance of the case candidates' cases suggests that legitimate doubt existed. To refuse, on re-examination, six masters' degrees smacks either of vindictiveness or criteria of judgement so uncertain that success or failure was more accidental than it should have been.

The truth that it is impossible to establish exact criteria for accepting or rejecting theses is no reason for not removing the blatant inadequacies and unfairness of the present. Essential improvements include:

- (1) Supervision only by persons known to be capable of doing so competently. Where supervisors are inexperienced in their task they must be supervised by, or act in concert with, someone who is experienced.
- (2) Careful provision must be made for replacing a supervisor in the event of his illness, resignation, sabbatical leave or other event which deprives the student of his services.
- (3) A supervisor must always read and comment upon his student's final thesis draft.
- (4) Responsibility for theses presented is a joint responsibility of student and supervisor. Rejection of a thesis should result in an immediate enquiry.
- (5) Supervisors and students should be informed in writing before viva of the points the external examiner intends to raise. Where appropriate these should include references to paragraphs and tables.
- (6) Supervisors should be present at their students' vivas and their normal task should be to support their students.
- (7) In all cases except that of the lowest postgraduate qualifications examiners should be able to award a qualification lower than that for which a thesis has been submitted.
- (8) There should be an automatic right of appeal against examiners' decisions; no justification of his claim by the appellant should be necessary. No fee paid at this stage should be more than any original fee: it should be returned if an appeal is successful.
- (9) Appeals should be appeals and

not re-examinations as if no final ruling had taken place. Appeals should be heard by three examiners, two of whom would be external to the institution in which the candidate would receive verbal and written evidence from the original examiners and the appellant. The appellant would be accompanied by the appeal, if he wished, by a friend.

If the first seven proposals achieved a reduction in the number of postgraduate failures, proposals 8 and 9 would not cause an appeal.

The variations in the academic conditions under which postgraduate students study and in which they are examined are too great to be reduced. This is desirable in the interests of justice at any time. Now that it has become the practice for many students to attempt higher degrees, the claims of students reinforced by those of the economy, organizational skill and comparability of what formally, identical qualifications situation in which (as has been a thesis can be failed, but second time on re-examination the same institution where the re-examination board was composed of the original examiners, declared adequate without revision in a neighbouring institution, similar standing, yet impossible acceptance in practice "was a disgrace" and "pick up a mildred" be changed.

John Froom

The author is principal lecturer Social Sciences at Middlesex Technic.

## Union view

### Loans debate slipping away from reality

#### PUBLIC PREFERS GRANTS

Most of the public favour continuing the current system of Government grants for college students rather than giving them loans to cover their living costs.

A study by the Institute of Economic Affairs has revealed that 43 per cent of the public would prefer either a grant system of the present type or one which is not linked to parental income.

Overall only 36 per cent of the people interviewed wanted to see student living costs paid through a loan scheme. Leaving aside those over the age of 55, there was a clear majority in favour of grants.

The figures lend increased weight to the call by the National Union of Students for an end to the current means-tested grants system. They showed that a majority of students wanted a grant with no strings attached. This was also the most popular option among parents.

At a press conference to launch his report, Professor Cedric Sandford, a supporter of loans, was forced to admit that evidence from abroad in favour of a loan system was "inconclusive".

Sadly, this was not the account which appeared in the press earlier this month after the publication of the Institute of Economic Affairs' study on student loans.

The Institute's shoddy unrepresentative report serves only to highlight two points: that the majority of students agree with NUS that the present grants system needs generous reform; and that there is a willingness to believe anything on an academic's say, even if it is based on dubious statistics.

It is another example of how far the loans debate has slipped away from educational reality. The headlines tell the story: "Give the students loans" (Daily Mail).

"Loans not grants plan for students" (Daily Express).  
 "Student loans in place of grants" (Daily Telegraph).  
 "Student loans preferred to grants" (The Times).

Several of the journalists at the IEA press conference were critical of the study and in particular of the way in which it had been presented in their press release. Professor Sandford, one of the authors of the study, was forced to admit that the heading on the IEA press notice claiming 62 per cent of the public was in favour of the loans, was misleading.

The IEA's figures revealed that a majority of the public supported some form of grants system, the only group favouring loans above everything else was the over-55s. A third of all students would have been less likely to go to university if they were given a loan instead of a grant, the report stated.



Scrutiny of the report showed a considerable degree of bias in the presentation of the original questions to the public and to students' parents. Parents were told, with no opportunity to question the assertion, that "a system of grants to all students regardless of 'need' would be more expensive in the long run than a government-backed loan scheme like that operating in Denmark or the United States" (page 83).

Presentation of the questionnaire to the public was even less objective: non-means-tested grants, according to the statement read to members of the public, "would mean an increase in public spending". Short of asking members of the public whether they wanted a reduction in taxation with no apparent social cost to themselves or an increase, the questionnaire could scarcely have been more one-sided.

The loans debate is not as simple as the pro-loans lobby makes out.

There is no evidence to suggest that loan systems in operation abroad, that loans save public money. All the systems investigated by NUS in our report *The Case Against Student Loans* published yesterday show running costs to be prohibitive.

There is ample evidence to suggest that loans are wasteful in human, financial and educational terms and, even over a long period, never repay anything like the continuing or initial outlay.

This is true whether the system is operated by the state itself or by banks who receive guarantees from the state. Two major clearing banks in California pulled out of the loans programme in 1976. In June 1979 the State Department of Health, Education and Welfare was forced to appoint two private banks to administer the \$20m from some 20,000 defaulters. The agencies had to take out \$5m insurance to cover possible lawsuits for violation of privacy.

Repayment is also a major problem in Denmark where the government had to pay over £3m to banks in 1976-77 to clear outstanding debts. In 1977-78 this went up to an additional £5m. In Holland the government has enacted a Bill to withdraw passports from anyone with outstanding loans to prevent them emigrating.

No matter what evidence to support the naive assumption held by some socialists that a loans system would do much to widen access to education.

From meetings with students abroad NUS knows that even our incomplete grants system is envied throughout the world. The problem of increasing access to education will not be solved by ill-informed, irrelevant and highly subjective recommendations from a handful of highly opinionated academics. Nor will the education system be improved by the universal handing of supposedly "academic" and "independent" studies by the educational press.

NUS is not afraid of an open and honest debate on loans but the danger at the moment is distortion and despair.

Laighton Andrews

The author is vice-president welfare of the National Union of Students.

## Education for adults

### The price of literacy — £14,000



Charlotte Barry

Arguments about the use of voluntary in the teaching of adults continue to rage long and hard. Debate about the role of the voluntary organizations in the field of adult education has until recently not been quite so well aired.

This week, however, the matter could come to a head when the National Federation of Voluntary Literacy Schemes (NFVLS) will be told whether or not it can expect funding over the next two years from the newly-formed Adult Literacy and Basic Skills Unit.

If the NFVLS does not receive a modest request for £14,000, a widely acknowledged and valuable body with the motto "Literacy for all" may have to raise the money for its work with the adult population.

important coordinating role in an effective way.

The NFVLS was founded in 1977 by organizers and tutors in voluntary literacy schemes who were concerned about the future of literacy provision after the expiry of the Government-sponsored Adult Literacy Resource Agency on which many organizations were heavily dependent for grant aid.

Today the NFVLS is a lively body consisting of about 45 schemes in the field of adult basic education, most of which are somewhat precariously funded by local education authorities, the Manpower Services Commission, the urban aid programme, the Workers' Educational Association, the Commission for Racial Equality and hopefully ALBESU.

The voluntary organizations include not only specialist groups such as the pioneering Cambridge House Literacy scheme in south-east London, but also more broadly based community groups like the Newham Parents' Centre, adult education centres like the Brighton Friends' Centre and the Swanmore Centre in Plymouth and Leeds, and national bodies such as the WEA and the National Gyms' Education Council.

In the past three years, with the tacit help of an invisible part-time organizer, the NFVLS has successfully proved the value of voluntary organizations: their contribution to innovation and development in adult literacy and their flexibility and ability to respond quickly to demands within the community.

Responsible for injecting an important amount of time and energy into the work of the National Literacy Scheme (NLS), they have pioneered the concept of one-to-one teaching in the home, and are involved in projects ranging from the use of photography and board games in literacy work to the establishment of officers, youth workers and helping parents help their children with reading in addition to the more traditional forms of tuition.

However, since 1975 the percent-

age of students receiving tuition organized by the voluntary schemes has dropped from seven to four per cent, as some have been forced to close through lack of funding and others have been co-opted by local authorities. The problems associated with co-option, which essentially queries the need for voluntary organizations rather than as independent bodies, have reached a point where they must take stock of their position and decide on their long-term role.

The tricky question of the nature of this role received an airing last week at a meeting of the NFVLS at which its chairman Ray Phillips, the NFVLS's National Parents' Centre, emphasized the difficulties faced by an organization which as part of the private sector is often regarded with suspicion by its state-run counterparts, but on the other hand is often seen as a way in which local authorities can get work done on the cheap.

Furthermore, as a body representing a number of groups providing a radical alternative to traditional literacy tuition, the NFVLS is not sure how to react to recent support from the Conservative Government. Speaking to the Advisory Council for Adult and Continuing Education, Education Secretary, Mr Mark Carleton said that the voluntary sector should be treated as a top priority.

"Ideally the voluntary sector and the maintained sector should complement and support each other. I certainly do not see either individual voluntary or voluntary organizations as a cheap option for clearly voluntary and voluntary organizations need support from the maintained sector," he said.

The only way forward now for the NFVLS is for it to expand its valuable role as innovator and support to a complementary role to state-provided literacy tuition. In this way, the voluntary organizations can be brought to reach more deeply into the community to the urban and isolated areas, which the local authorities scheme fail to reach.

However, in order to do this, the NFVLS must be given proper and secure funding to get on with its work. Without a firm supportive framework no voluntary body can be considered worth its while.

## Don's diary

### Day 1

It took me back to my academic youth flying in on a Viscount 1 (pre-stretched version) from Lusaka to Blantyre at a cruising speed of 250 mph. The Rolls-Royce engines looked large and reliable with comfortably turning props in front. I was worried about the girl in jeans in the seat ahead. My tourist guides told me that Malawi insists that women wear respectable women's clothes. I am glad that there will be no scene at immigration, for she has just made a trip to the toilet to put on an acceptable skirt. Picked up at the airport by a car from Chancellor College (University of Malawi) and driven to Zomba. Flag-lined streets all the way; nothing to do with me, it is Malawi's Independence Day (16th anniversary).

### Day 2

Spent the morning reading exam scripts of final year students. They did a four year general degree at Chancellor College, starting roughly from O level knowledge. Some students have specialized in chemistry in their fourth year, others are doing only one or two units to supplement their main interest. I remember seeing the examination papers in draft form a few months back and making what I hoped were helpful comments. Other people's exam papers always seem more difficult than my own. Played a game of squash at the local Gymkhana Club. Old colonial atmosphere still lurking in corners: cricketers taking tea, family tennis on clay courts with plenty of small ball boys.

### Day 3

Fifteen students given visas this morning. I was worried about their response to a stranger who had flown from England to decide on their future—I hadn't, of course, but that what they would be thinking? The first student was a great relief, sharp and articulate. No, he had not been especially selected as opening batsman, as his name was first in the register. I kept my eyes on the basics and, in retrospect, I should have tried to stretch him a bit more. It was a pleasure to see students nearly turned out, particularly the girls, who all wore long cotton frocks. Overall it was a satisfactory morning. One student having dried up. Think this was nerves rather than the strategy that it is better to say nothing than to say something foolish.

### Day 4

Started the morning with a visit to the market with my hostess. The traditional bargaining was in full swing. I was not allowed to buy avocados at 8p each, because last week they were only 2p. Bananas at 1p each were accepted as being reasonably priced. Next a visit to the bank where I flourished my document saying that EN should have been transferred from England to be drawn upon if needed. No, sir, they knew nothing about that.



Rolls of tobacco for sale in Blantyre market

but promised to send telegrams here and there to keep down the time this happened to me. I had an embarrassing three weeks short of funds. There was a willingness about this bank that gave me hope. I think their initial response was due to not knowing where to look, rather than anything having come through. To the university to sort through a few more scripts and to discuss provisional grades ready for an official meeting tomorrow. It may save a few hours if we have something that other members of the board can argue against.

### Day 5

A very amicable exam board meeting. There was some discussion about the setting of arbitrary standards: grade 5 equals "near distinction" for example. A sensible continuation of past practice was adopted. It was a pity that the brightest student in the class obtained rather modest grades. I do not think he was just a bit awkward and would be willing, myself, to back him for further training. No student failed the final examinations, which is very satisfactory. There have been plenty of hints for others in the past few years and the poor jumpers have fallen earlier in the race. The sole of my sandal suffers a severe fatigue fracture. This modern polyurethane is really rather poor. I am advised of a helpful cobbler in town.

### Day 6

The first pressures of examining being over, I had a quiet chat with a few people on course contents and sounded out the links between different science departments. Visited the library, to be pleasantly surprised by the good collection of text books, but their periodicals are thin on the ground. This alone would make it difficult to maintain an active research programme in the sciences, invited to an evening meeting of the local music society. With no television and little of interest on the radio, the expatriate community works enthusiastically at the old-fashioned habit of self-entertainment. A few minutes here could do wonders for my bridge, tennis and clarinet-playing.

### Day 7

Pick up my sandals nearly mended with old car tyre. In the United Kingdom both sandal and car tyre would have gone into the rubbish. A few expatriates in the common room who are moving on; one to Salisbury, one to Belvoir, one daring to return to England without a job. For a few days, weeks or even a year this could be a marvellous place to work and live. For an academic, lifetime one would need to make some compromises.

J. N. Murrell

The author is dean of the school of molecular sciences at the University of Sussex and was recently external examiner in chemistry at Chancellor College University of Malawi.

**Librarians**

**KIELE**  
 THE UNIVERSITY  
 LIBRARIAN

Applications are invited for the post of Librarian at Kieleva University, Kieleva, Kenya. The successful candidate will be responsible for the library and for the management and development of the library service. The post is full-time and permanent. The salary scale is KSh 10,000 to KSh 15,000 per annum. The closing date for applications is 1st November 1980.

## Colleges of Higher Education

**Athrofa Gogledd-dd Cymru**  
 The North Wales Institute  
 of higher education

## SENIOR LECTURER

### PHOTOGRAPHY AND AUDIO-VISUAL STUDIES

Applications are invited for the above post from suitably qualified and experienced persons. The work is in the first place, concerned with D.A.T.E.C. and City and Guilds courses in the area.

## LECTURER II

### JEWELLERY AND SILVERSMITHING

Applications are invited from suitably qualified and experienced persons for the above post. The work is in the first place, concerned with D.A.T.E.C. and City and Guilds courses in the area. A knowledge of gemology would be an advantage.

Salary for Senior Lecturer—£7,092-£8,200 (Bar) £5,371 (overseas).

Salary for Lecturer II—£4,306-£5,000 (overseas pending).

Application forms and further details may be obtained from the Director, North Wales Institute of Higher Education, The Coach House, Kestelton Road, Flint, Cymru, SA1 2DQ. Tel: 01222 512200. Closing date for receipt of applications is 31st August 1980.

## Overseas

### AUSTRALIA NATIONAL TAFE CENTRE FOR RESEARCH & DEVELOPMENT CO-ORDINATOR

The Australian Education Council has approved the establishment of a National TAFE Centre for Research and Development.

The main functions of the Centre will be:

- analyse skills required for various occupations;
  - review and evaluate technical and vocational education curricula and programs particularly those with national significance;
  - investigate particular topics as directed and prepare appropriate reports and recommendations; and
  - operate the national research clearinghouse.
- DEVELOPMENT OF EDUCATIONAL TECHNOLOGY**
- plan and develop learning materials relevant to the particular needs of technical and further education students; and
  - evaluate, develop and promote the use of technological aids for training.

The Centre will be established in Adelaide, South Australia, and will be funded jointly by the Commonwealth and State Governments.

The Board of the Centre is seeking a person with a proven record in educational research and/or curriculum development and with the qualities needed to launch the Centre as its Co-ordinator. The Co-ordinator will be the full-time Chief Executive of the Centre and a member of the Board.

While not wishing to prescribe too closely the qualifications and experience required, the Board would expect the appointee to possess a number of the following qualities:

1. The ability to manage, lead and inspire a team of quality educational researchers and support staff.
2. A wide understanding of technical and further education and its relation to industry and commerce and their manpower needs.
3. Recognised experience and successful involvement in educational research and development.
4. An ability to communicate effectively with government, educational, commercial and industrial leaders at the highest level.

The post of Co-ordinator will attract a salary in the order of \$40,000 p.a.

Persons interested in being considered for the position should write to the first instance to Mr. L. J. Coates, Director-General of Further Education, Department of Further Education, Education Centre, 271 Rindlers Street, Adelaide, South Australia 5000, by 15 August 1980, and should mark their letters "Confidential" and "D Coates".

For information on applications to the TAFE Centre, please write to the Subscription Manager, The Times Higher Education Supplement, Box 7, New Printing House, Gray's Inn Road, London WC1X 8BT.

## FOR INFORMATION

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## AUSTRALIA ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY LIMITED ASSISTANT DIRECTOR (STUDENT SERVICES)

Applications are invited for the position of Assistant Director (Student Services) which has recently been established by the Council of the Institute.

The Assistant Director (Student Services) will lead the Student Services Division which has responsibilities covering both the Advanced and Technical Colleges of the Institute. The appointee will be accountable for ensuring that the needs of students are met and that their development is adequately recognised, planned for and met.

It is anticipated that the successful applicant will have the capacity to work creatively and sensitively with students and staff in an educational environment.

Applicants should possess tertiary qualifications and have considerable administrative experience, preferably in a tertiary institution. Salary within the range \$20,298 - \$26,670 p.a.

A position description should be obtained from Staff Unit RMIT P.O. Box 2478V, G.P.O. Melbourne 3001, Victoria, Australia. Applications quoting reference number 215-00-N to the Officer by 22/8/80.

## AUSTRALIA ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY LIMITED SENIOR LECTURER DEPARTMENT OF PHOTOGRAPHY

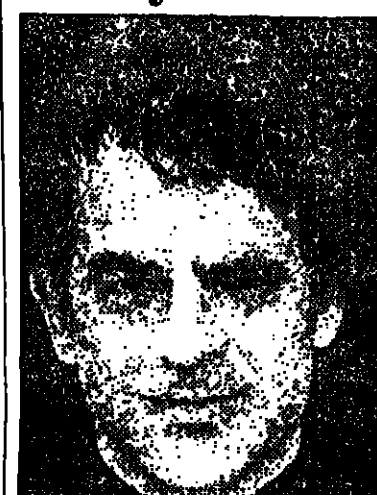
The Department of Photography offers a BA level course in professional photography and an advanced stream leading to scientific photography and an art stream leading to commercial and advertising photography. The senior lecturer would lead the science stream of the course.

Applicants should have academic qualifications in photographic technology, scientific photography or the equivalent, and have had extensive experience in these fields. Some educational experience would be a decided advantage. Salary within the range \$22,841 - \$26,622 p.a.

A position description should be obtained from Staff Unit RMIT P.O. Box 2478V, G.P.O. Melbourne 3001, Victoria, Australia. Applications quoting Ref. No. 153-10-AN to the Officer, RMIT by 19/8/80.



## The Lions' share of liberty



## Steven Lukes

In general, the instrumental sequentialist approach is, of necessity, open to the drawing of distortions. So, economic boycotts are especially valuable when they are directed at the suppliers of military hardware, such as British Leyland, General Motors, or on companies like British Leyland, Siemens, C.E.C. which fail to recognize

areas and fail to visit hidden, remote resettlement camps where people, herded together, are out of work and starving, or townships where migrant workers live in fury and frustration, in crowded, all-male hostels, far from their homes and families. Complacent reactions to what "see" must be exposed for the

But there is a general c

argument to all of this. A boycott, after all, is a boycott, and the very nature of the boycott is to make distinctions. As Dr. DeRidgahan points out, there are no such things as academic exercises, but in the real world they are imposed. As Dr. DeRidgahan points out, it is simply not possible to implement a boycott without letting its boundaries be eroded. There is a chain connexion between all these forms of contact.

What we have here is the case of a contradiction. The issue is the politics of the boycott, requiring a comprehensive exclusion; and the moral of the boycott, requiring individualism. Both are based on the same premises, but on an assessment of different consequences.

This contradiction is inherent and unavoidable. Where

ture view, there is a strong political

negative all association with Africa: the chain, connectivity, individual have to be the catalyst for the consequences that entering into such an assertion without fully appreciating the strength of the colonialist discourse of the day. At the least, when he must take full responsibility for his actions, he must have clear objectives, as on an unambiguous commitment to the liberation of Africa, the economic liberation of black Africans. For academics, this imposes two clear conditions on any visit: that any visit to Africa must be beyond the facades, and that it gives clear support to the liberation struggle. Purely academic confinement to the lecture room can have no such limitations.

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## What constitutes ordinary residence?

unemployment (which will affect the quality of the labour force) is unlikely to be met for an exact match between the output of graduates and the demand from the labour market is correspondingly reduced. For the next few years the emphasis will clearly be on raising quality rather than increasing quantity, with the muddled messages of the market will find it much more difficult to guide, as some of the debate provoked by Finisison has already shown. Throw in neo-classical economics, and the American industrial democracy as a few other likely features of the 1980s, and the case for muddled higher education in a liberal, rather authoritarian, direction, seems to be strengthened. In such circumstances manpower planning needs to be regarded with great reserve.

## What constitutes ordinary residence?

The Government has indicated a willingness to do something to ease the burden of refugee students and such a change would be a valuable contribution. It should come into effect as part of a thorough revision of the whole area of ordinary residence

## National deal for non-teachers

and preserve their autonomy by holding on to the right to pay their workers long rates, and all universities long ago agreed to make similar arrangements with their employees, their teachers. The same does not even arise in non-university sector, because polytechnic employees, from director to the porter, are employed on the same scale as the university staff. It is difficult to escape the conclusion that the refusal of some union teaching staff is a *Marxist* sentimental 'patriarchalism' and that the only way to make the labour costs as low as possible in spite of these really common-sense but very fundamental demands of their stubbornness will be industrial relations that put to rest the

so, then the way is open to those who are not so sure that certain kinds of contact, even if they are made in the form of visits and visits in return, would not have the effect of bringing about the desired gains. Some such contacts might be made in the form of opening up lines of support and solidarity, not only for "liberals" but for others involved in the struggle for liberation. And visiting in Africa can have a powerfully galvanizing effect, motivating and supporting that struggle rather than merely sympathize with it, coming to the right opinions into

In general, the instrumental sequentialist approach is, of necessity, open to the drawing of distortions. So, economic boycotts

expatriate valueless small firms on the suppliers of military hardware, British engineers, General Motors, or companies like British Leyland, Siemens and G.E.C., which fail to recognize genuinely independent black workers on their banks, like Barclays, or buy defence bonds and promote investment in the "homeland." Cultural boycotts should not be a performance of Peter Wabere Marat/Sade in Soweto. To praise or condemn visits to South Africa by Sir Robert Birely (who found a library in Soweto and is remembered there) or the B

lished a powerful, clear-sighted article in *The Times*) would serve its purpose. Others, however, glibble, some purposeful—don't do any harm, such as the Jeeps of the Council delegation. Such a visit to observe the comforting facade of the government's efforts to greet the impressionable tourists. They visit Soweto on a Sunday and fail to notice its desolation of all amenities; they see inter-

"international" hotels and shops across and fail to visit hidden, remote resettlement camps where people, herded together, are out of work and starving, or in townships where migrant workers live in fury and frustration, in crowded, all-male hostels, far from their homes and families. Complacent reactions to what "see" must be exposed for the

But there is a general counter-argument to all of this. A boycott, after all, is a boycott, and it is of its very nature to be comprehen-

To make all these discriminations is all very well as an academic exercise, but in the real world they are impossible to implement. As Dr. Ridehalgh says, "It is simply not possible to implement a partial boycott without letting its boundaries be eroded." There is a chain connexion between all these forms of contact.

What we have here is the contradiction of the whole

issue. One might call it the tension between the politics of the boycott, requiring a comprehensive boycott, and the moral exclusion, and the moral boycott, requiring individual assessment based on an assessment of consequences.

This contradiction is neither such a reality and unavoidable. What logical conclusions follow? In view, there is a strong political argument against all association with Africa: the chain of commerce must exist and have to be included in the calculation of consequences for the individual should come entering into such an association.

least, when he must take full responsibility for his actions, he must have clear objectives, as well as an unambiguous commitment to supporting the political and economic liberation of the black people of South Africa. This is not to say that a particular visit imposes particular obligations on any visitor: that anyone who does not find it possible to go beyond the facade, and to give clear support to the liberation struggle, is not a liberationist. Purely academic or contrived support is not a contribution to the struggle, and liberationists can have no doubts about this.

هذه من اجل